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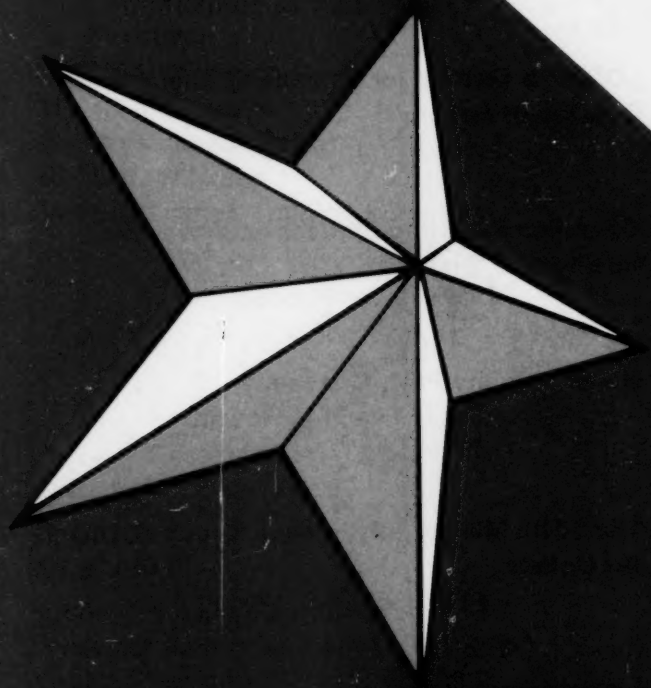

SALT I

Military Intelligence

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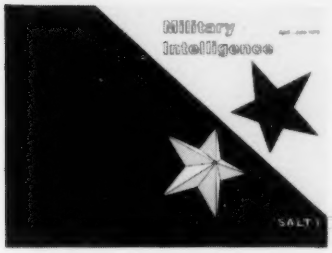

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"Promoting Professionalism in Military Intelligence"

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FEEDBACK

Readers,

The "MI Prayer" printed in the January-March 1979 issue of Military Intelligence has generated some unfavorable feedback from our audience.

It was intended to humorously illustrate some of the difficulties facing the Military Intelligence branch today and to be considered in the light in which it was presented.

I deeply regret if it proved offensive to the religious beliefs of anyone among you.

SETH W. BURKETT
COL, MI
Director
Directorate of Training
Developments
USAICS

The Directorate of Training Developments, USAICS, has proponency for Military Intelligence Magazine.

Editor

With this issue of "Military Intelligence," we are implementing the use of an unjustified right hand margin known in printing circles as "rag right" composition.

The unjustified right hand margin is considered to be more readable and more space-efficient than the justified right margin and can be found in many commercial publications.

At the 1979 TRADOC Periodicals Conference, it was decided that "Military Intelligence" would introduce the unjustified right hand margin in its April-June 1979 issue.

The purpose of this experiment is to provide you, the reader, with a more effective magazine, one that is clearer, easier to read and attractive.

Does the unjustified right hand margin work for you? In our 1979 Annual Readership Survey, you will have the opportunity to comment on this format. Thank you very much for your support.

Editor

Foreign Area Officer Program A Critique

Editor,

The Bullard/Martin article, —— Foreign Area Officer Program: A Critique," in the Oct-Dec 78 edition of *Military Intelligence* proposed the establishment of an FAO training detachment at the Naval Postgraduate School in Monterey, California. Unfortunately, the authors did not mention the FAO course and facility already in being at the US Army Institute for Military Assistance (USAIMA), Fort Bragg, North Carolina.

USAIMA's School of international Studies conducts a 22-week Foreign Area Officer Course (FAOC) designed for officers entering the FAO specialty. The FAOC POI integrates area studies and language training with methodological techniques in the fields of political science, economics, sociology, and international relations. The School of International Studies faculty consists of officers with graduate degrees in all of these functional areas. The five Area Seminar Directors have extensive field experience in their respective areas of expertise and provide comprehensive counseling and guidance for student FAO's.

FAOC should be the first step for officers assigned the FAO specialty. The background and experience gained from FAOC provide a sound basis for students going on to graduate schooling and in-country training to structure their study programs with more relevance and application to the needs of their future FAO assignments.

The Director of Training Developments, USAIMA, has been tasked to examine basic requirements for FAO positions under the Instructional System Development Process. The results of this study and analysis should provide the basis for redesigning the FAO Program and improve education of officers preparing to assume duties of the highest political military importance.

Yours truly,

R. Maladowitz
Colonel, Infantry
Assistant Commandant

Editor,

Why not start an "FAO Bulletin Board" in ***MI Magazine*** where news of importance to FAOs can be printed? FAOs need a national level bulletin board for exchange of information.

I feel certain that each FAO has access to items he knows would be useful to other FAOs if there were a way to "get the word out." ***MI Magazine*** is highly visible and well-received. Including a "FAO Bulletin Board" could only make your publication that much more useful to those of us who see it as a much-valued adjunct to our other sources of information.

Here's an item of interest to Arab World FAOs that deserves repeating—
The Future of Saudi Arabian Oil Production—A Staff Report to the Subcommittee on International Economic Policy Committee on Foreign Relations, United States Senate, dated April 1979 was released Saturday, April 14, 1979. The report details the technical, conservationist, and financial parameters which will affect Saudi Arabian oil production decisions. Based upon information collected by the committee staff over the last year, it seems evident that the US should not base its energy plans on the premise that Saudi Arabia, as residual supplier, will produce enough oil to supply the needs of the US or the world economy over the next two decades at anticipated rates of oil consumption. 20pp. with 5 appendices.
General Note Of Interest To All FAOs—To order your copy of a Bill, Committee Report, or Public Law, write for any with a House Number (HR 99999) or a Public Law (PL 99-999): Document Room, US House of Representatives, Washington, DC 20515. For any with Senate Number (S. 9999), write the Senate Document Room, Washington, DC 20510. Please note the different zip codes. Printed hearing records are available by writing the subcommittee which held the hearing.

Send a self-addressed label with your request and if there are several items you want, they appreciate if you list them in numerical order. **There Is No Charge For These Documents.** If you do not hear from the Document Room after a month or so, you may wish to follow-up by writing or calling your Congressman's Office.
Sincerely,

Robert M.S. Anderson

MAJ, MI
USAR
FAOP/RC
—Arab World

Editor,
Today I had the opportunity of reading the *Military Intelligence* magazine for the first time. I was really impressed with the diversity in your articles, from the excellent; *Strategic Threats to China*, by Captain J.F. Corbett, to the absolute trash written by Major W.L. Howard titled *Notes from the Past (Part I*,uggggg!).
I realize it is the American way to publish many opinions and let the reader decide what is good or bad, but after reading Major Howard's article no less than three times, trying to understand what was the purpose of the article, and why it was printed, I decided to write to you.
Major Howard's article reflects not only his own incompetence as a combat soldier (page 43, reference the M2 carbine), but also his article renders the "Military Intelligence CORPS" a black eye. Of course, I am rendering only my opinion as a combat experienced officer who served at the Battle of Dak-To, and saw the battle from a much different angle than Major Howard. . . .I saw great acts of valor, competent MI personnel working hard, and dedicated Officers leading their men. I hope your staff will review Major Howard's second portion of his article and replace it with material that reflects the high standards the MI CORPS set for themselves in Vietnam and does not insult the dedicated professional MI soldiers who I had the pleasure of working with during my three years in Vietnam with the 5th Special Forces Group, Command and Control North.

DONALD E. ZLOTNIK
Major, U.S. Army

Editor,
Notes from the Past - Excellent; brings back many thoughts from two tours in RVN. More articles on "IPB."

Theodore Stahr, Jr.
Menlo Park, CA

Editor,
Excellent issue! My senior Army ROTC cadets gained a very favorable impression of our obviously professional MI Branch.

ROTC Instructor
St. Petersburg, FL

Editor,
As a member of the reserves in Canada, especially in the field of intelligence, I was happy to see an article concerning the reserves. A very good issue. there should also be a little bit more information on the South American nations and members of the Warsaw Pact. Issues are getting better.

Akos V. M. Baktay
Lachine, Quebec

Editor,
I like the magazine, but think the format should deal more with general intelligence features today rather than specialists' details. I believe that more emphasis should be placed on what the rest of the world's doing and not so much on US Army activities.
Thanks.

Richard G. Narushoff
Monroeville, PA

Editor,
The magazine is getting better all the time. The MI Prayer was great; there should be more humor, cartoons, in the magazine. Please publish updated roster of MI 0-5 and above commanders and G2s.

MAJ Allen R. Chellis
APO NY 09036

Editor,
As a contributor to, reader and supporter of *Military Intelligence* during my three-year assignment with the Intelligence Center and School, I have watched our magazine grow into a truly superb professional journal, highly respected throughout the community. Keep up the good work!
Concerning your *Battlestar Galactica* question in the January-March 1979 issue, my keenly trained RF-4C recce pilot eyes say "Yes" that is indeed MI brass the Colonial Warriors are sporting.

Ernest W. Rapalee, Lt. Col, USAF
Senior Air Force Representative

Editor,
You are doing an absolutely outstanding job. Why don't you devote a page per issue with "Intelligence Opportunities at Fort..." and do a special on each area of personnel concentration?

LTC Wm. E. Harmon
Springfield, VA

Editor,
Upon reviewing my article, **Women in Military Intelligence,** in the January-March issue of MI Magazine, I discovered an error in the statistics presented. I stated in the article that over 76% of MI officers have at least a baccalaureate degree, however, the correct figure is 96%.

Stephen C. Conrad
CPT(P) MI

Duck!!!

If it looks like a duck and acts like a duck, it's most likely a duck. Unless it's a seagull.

Anonymous
Imagery Interpreter

SALT I: Its Predecessors, Objectives, And Lessons

by MAJ Robert G. Canar

Introduction

The advent of nuclear weapons forced national political leaders to develop policies recognizing the international implications of nuclear weapons and addressing the employment of such weapons in world crises. The initially dominant role of the United States in nuclear arms has eroded as Soviet capabilities have increased. As our relative dominance has decreased, US nuclear policy has evolved. Each new policy has recognized the growing nuclear capability of the Soviet Union and varying degrees of US nuclear retaliation in response to different types of aggression against the United States or her allies.

Development of the US nuclear arsenal envisioned a force of land- and sea-based systems which would provide a redundant and survivable force. The need to continually increase and improve strategic arms was seen as a prerequisite to future arms control in the belief that future mutual management of arms through negotiated agreements would be more realistic than efforts to impose nuclear disarmament. For agreements to be reached, US policy makers recognized the need to negotiate from strength and the American public accepted the necessary defense expenditures.

As arsenals grew and the specter of nuclear war became increasingly horrendous, the United States and Soviet Union recognized the need to reduce world tensions through mutual agreement on future arms development and deployment. Thus, talks between the United States and the Soviet Union began in 1969 in Geneva, Switzerland.

On 26 May 1972, the initial Strategic Arms Limitation Agreements were signed in Moscow by President Richard M. Nixon and the General Secretary of the Soviet Communist Party, Leonid I. Brezhnev. Both the Anti-Ballistic Missile (ABM) Treaty and the Interim Agreement on Certain Measures with Respect to the Limitation of Strategic Offensive Arms were later amended in the Vladivostok Agreement of November 1974 signed by President Gerald R. Ford and Secretary Brezhnev. During the initial five year tenure and as extended pending finalization of SALT II, the Agreements were allegedly violated in various ways by both nations.

A review of US national nuclear policies leading up to the initial Strategic Arms Limitation Talks, of the stipulations of the Agreements, and of the nature of the alleged violations should provide insight into some considerations which should be taken into account in future talks. It is the purpose of this essay to provide some of this review and analysis.

Development of US Nuclear Policy Prior to SALT I

The initiation of the nuclear age forced US policymakers to consider the role of nuclear weapons in future world crises. The initial US policy of "Massive Retaliation," developed in the 1950s, threatened the employment of nuclear weapons in retaliation for any aggression, conventional or nuclear, against the United States or her allies. When formulated, the United States possessed unquestioned nuclear superiority.

In the early-1960s, development of a credible Soviet offensive nuclear threat caused the United States to adopt the policy of "Mutual Assured Destruction" (MAD). Simply stated, MAD recognized the mutual vulnerability and capability of the United States and the Soviet Union, and estimated that while one could initiate a nuclear attack upon the other, the attacker could not prevent her own homeland from being devastated in retaliation. This was the initial expression of strategic nuclear deterrence through mutually balanced offensive might.

By the late-1960s, the continued development of Soviet strategic power was recognized by the United States. While national objectives dictated that the United States not allow another country to acquire the power to impose its will upon her or her allies by application or threat of superior strategic forces, neither was the United States interested in an unrestrained arms race to retain her eroding strategic nuclear advantage. Therefore, the policy of "Strategic Sufficiency" was adopted in the early-1970s. Four criteria for the development of future strategic nuclear forces were established: (1) maintenance of a second strike capability; (2) deployment of no forces which would be vulnerable to a Soviet first strike; (3) prevention of the Soviet Union from gaining an advantage in forces which would allow her to impose greater damage upon American urban/industrial centers than could be

inflicted upon her in retaliation; (4) defense against small or accidental attacks.[1]

During the 1960s, as the policy of Strategic Sufficiency evolved, the United States decided to halt further quantitative deployment of strategic offensive weapons and adopted a policy of working toward qualitative improvement of existing systems. Development of an anti-ballistic missile (ABM) for defense of strategic missile fields was progressing favorably. The Soviet Union, on the other hand, was deep into production and deployment of a third generation of land-based intercontinental ballistic missiles (ICBM) and sea-based submarine launched ballistic missiles (SLBM), each of which was qualitatively inferior to its US counterpart. Development of a Soviet ABM system was delayed by techical difficulties and made obsolete in the late-1960s by the introduction of multiple independently-targeted re-entry vehicles (MIRV) on US strategic missiles.

In proposing arms control negotiations in the mid-60s to limit strategic weapons, the United States implicitly advanced a theory of deterrence of strategic nuclear war through the establishment of strategic parity, allowing the US continued pursuit of international objectives while preventing an unrestrained arms race with no apparent end. The Soviets may have entered into negotiations with the same belief that deterrence could be attained through equivalency. However, the Soviet Union also perceived herself as still trailing in strategic nuclear power and probably saw negotiations as a means of narrowing the difference through time. Additionally, the US request for arms limitation talks provided the Soviet Union an element of stature in international politics for its recognition of her as a world power.

Arriving at a basic definition of nuclear equivalence was technically demanding and intricate, and the difficulties which confronted early negotiators were compounded by the disparities in national strategic weapons. For negotiated results to be meaningful, the agreements would have to allow an equitable assignment of forces. However, the character of the strategic forces of the United States and the Soviet Union in the late-60s was largely affected by national technical capabilities. While US weapons were relatively small and accurate, Soviet weapons were large and inaccurate. While US planning had distributed strategic weapons between land-based, sea-based, and bomber systems, the primary Soviet threat was contained in her ICBM force. While the continental United States was vulnerable only to Soviet strategic nuclear strike, the Soviet Union perceived a threat from forward-based, tactical, US land, sea and air forces. Essentially, efforts to reach agreement had to consider how much strength was sufficient to achieve security as well as the lack of symmetry in opposing forces.

These situations and circumstances all impacted on the final agreements between the United States and the Soviet Union. Political and military conditions existing prior to and during the negotiations must be considered in assessing the success of this attempt to reduce world tensions through strategic nuclear negotiations.

Provisions of SALT I And Alleged Soviet Violations

SALT I addressed two areas: anti-ballistic missile (ABM) systems and offensive strategic weapons. The ABM Treaty was a long term, definitive agreement that essentially provided for the following:

(1) Prohibition of a nationwide ABM deployment.

(2) Prohibition of regional ABM deployment, except as specifically authorized.

(3) Development of two widely separated ABM defenses - one for defense of the national capital and one for defense of ICBMs or two for the defense of ICBMs. This provision was amended in the November 1974 Vladivostok Agreement to allow for establishment of only one ABM site.

(4) Limitation of 100 missiles to be deployed at each ABM site.

(5) Restriction of ABM radars to specific areas and numbers while also imposing qualitative restraints and restrictions on the testing or conversion of other systems, such as air defense systems, for performance in an ABM role.[2]

The Interim Agreement on Certain Measures with Respect to the Limitation of Strategic Offensive Arms was the second agreement reached at Geneva. Unlike the ABM Treaty, the Interim Agreement provided only a temporary freeze in duration and scope, did not address all strategic nuclear delivery systems and did not provide long-term, comprehensive limitation on strategic offensive weapons systems. Like the ABM Treaty, modifications to the Interim Agreement were made through the Vladivostok Agreement of November 1974. These amendments imposed quantitative limits on launchers and numbers of MIRVed warheads. The Interim Agreement, as amended:

(1) Limited the total number of strategic launchers to 2,400.

(2) Limited the total number of launchers with MIRVed warheads to 1,320.

(3) Prohibited construction

of additional, fixed land-based missile launchers.

(4) Limited the numbers of sea-launched ballistic missiles (SLBM) launchers and modern ballistic missile submarines (SSBN).[3]

To insure compliance with the Agreements, each nation was to use "national technical means of verification" - a euphemism for satellites. Efforts to conceal or camouflage deployment sites or impede verification systems were prohibited. A Standing Consultative Commission was established to address grievances alleged by either side. Eight major violations of the Agreements by the Soviet Union have been alleged:

(1) Construction of special purpose silos at a number of launch sites in violation of the agreement to halt construction of new silos. The Soviets claimed, and the United States accepted, that these facilities were for launch control and not missile deployment.

(2) Efforts to conceal activities at launch sites. While concealment activities were present both before and after signing of the Agreement, these activities increased in 1974. By early 1975, and after protests by the United States, the United States concluded that the concealment activity had ceased.

(3) Conversion of "light" ICBM launchers into "heavy" ICBM launchers. During the negotiations, Soviet participants refused to accept definitions on "heavy" or "light" missiles. Although the United States unilaterally defined these terms, no mutual agreement was reached and replacement of the "light" ICBM by "heavy" ICBM continues.

(4) Possible testing of an SA-5, surface-to-air missile system, radar in an ABM mode. While the Soviets denied the charge, claiming that the radar had been involved in range safety or instrumentation roles allowed by SALT, such activity ceased shortly thereafter.

(5) Failure to disassemble excess ABM test launchers. Even though these launchers were not seen to be of strategic value, they did violate the terms of the ABM Treaty.

(6) Construction of an ABM radar on Kamchatka. Though the construction was not judged to be of strategic significance, the stipulations of the ABM Treaty were again violated. Discussions on this matter continue.

(7) Delays in dismantling of obsolete Soviet launchers were experienced and the authorized total number of land-and-sea-based launchers were exceeded. The Soviets acknowledged the delay prior to the voicing of objections by the United States. Agreement has been reached on resolution of the problem.

(8) Efforts by the Soviets to conceal launcher conversions at test ranges. The conversions were in violation of the Agreement and ceased in 1977 following objection by the United States.

Recently, allegations that the Soviets exceeded the established number of 62 modern SLBM launcher submarines have been raised. That discussion continues at this time. Other questions and charges also have been raised, including charges of developing mobile ABM radars, testing of air defense missiles in an ABM role, developing of mobile ICBMs and attempting to deny telemetry data from missile test firings.[4]

Analysis Of Alleged Violations

The primary purpose of US entry into SALT was to prevent nuclear war through accommodation, thereby also reducing world tensions caused by an uncertain peace. SALT was intended to enhance the security of each nation by imposing a situation which would prevent either nation from attempting to gain a unilateral strategic advantage. Assessment of SALT's success must consider not only the strategic situation which now exists after seven years of SALT, but also its success in light of the understandings which existed during the negotiations and of the objectives which the negotiators hoped to achieve. Finally, evaluation must consider SALT's successes as well as its failures.

As discussed earlier, the policy of Strategic Sufficiency was partially predicated on the survivability of a second strike, or retaliatory, force. This condition was acknowledged in the ABM Treaty wherein the United States and the Soviet Union agree that they may have only two ABM deployment areas, so restricted and so located that they cannot provide a nationwide ABM defense or become the basis for developing one. Each country thus leaves unchallenged the penetration capability of the other's retaliatory missile forces. However, it appears doubtful that the Soviet Union ever accepted, in fact, this defenseless posture. For example, Soviet economic, political and military dominance imposed on Eastern European countries following World War II has been explained frequently as a means to insure that the Soviet homeland is not ravaged by future wars. In a book published in 1976, Soviet Marshall of Aviation, G.V. Zimin, a doctor of military science and Commandant of the Zhukov Military Academy of Air Defense, wrote: "The enormous destructive force of nuclear warheads brings up the necessity of destroying every warhead, without exception, which penetrates into the interior of the country through the air or from space."[5]

It does not logically follow from these actions and statements, and many other similar ones, that the Soviet leadership is willing to accept a situation which allows for the uncontested destruction of the Soviet Union. In the late-1960s, the existent Soviet ABM system was made basically obsolete by advances

in US ICBM technology. At the same time, the Soviet Union perceived the United States as possessing a viable ABM system and on the verge of deploying it. This presented a threat to the Soviet offensive systems. Obviously, an agreement to restrict the US ABM system was to their advantage. The alleged violations of the ABM Treaty would appear to support the contention that the Soviets have no intention of leaving their homeland susceptible to uncontested attack. It can be assumed that Soviet efforts to develop a viable ABM system will continue, and if successful, deployment of such a system would probably be attempted either through further negotiations or, if necessary, through willful, convert violation of SALT.

An evaluation of the alleged violations of the offensive limitations included in the Interim Agreement is much more difficult. In negotiating the ABM Treaty, there was a semblance of symmetry in forces and each nation believed it to be in their immediate national interest to enter into an agreement at that time. However, the vast differences in types and capabilities of offensive systems, their deployment modes, and geopolitical considerations have frustrated a simple solution to offensive systems limitations. Further, national political and economic considerations had already formed the complexion of strategic systems projected for the next decade. It was not probable that either nation would agree to significantly alter deployment of viable offensive systems then being developed or deployed.

Finally, and most significantly, it was recognized that limitations on only specific systems for a specified period of time were negotiated. As shown below, this was clearly understood by those responsible for negotiating SALT I.

In presenting the Agreement to members of Congress, President Nixon stated:

> . . . Mr. Brezhnev and his colleagues made it absolutely clear that they are going forward in defense programs in the offensive area which are not limited by these agreements. Under those conditions...for the United States not to go forward with its offensive programs, or worse, for the United States unilaterally to reduce its offensive programs would mean that any incentive that the Soviets had to negotiate the follow-on agreement would be removed.[6]

The Interim Agreement was defined by Ambassador Gerard Smith, then Director of the US Arms Control and Disarmament Agency and head of the US SALT delegation, as an interim holding device designed to limit the aggregate number of ICBM and SLBM launchers from rising beyond an established level while negotiations to further restrict them and other systems continued.[7] That both nations would continue to develop their strategic offensive systems within the limitations of the system was fully accepted not only by the negotiators but also by anyone who familiarized themselves with SALT's provisions.

Two inferences should have been made by anyone familiar with the Agreement. The first was that those weapons or capabilities which one side or the other refused to limit or define should have been recognized as ones which that side intended to develop. The second was that each side implicitly accepted the Agreement as being in their own national interest.

The US perception of the Agreement are probably best expressed by Henry A. Kissinger, then Assistant to the President for National Security Affairs, who stated while addressing members of Congress in 1972:

> The Soviet Union has been deploying at an average annual rate of 200 ICBM and 100 SLBM missiles a year . . . . In other words, as a result of decisions (for US qualitative, not quantitative ICBM and SLBM development) made in the 1960s and not reversible within the time frame of the projected agreement, there would be a numerical gap against us in the two categories of land- and sea-based missile systems whether or not there was an agreement. Without an agreement the gap would steadily widen. The agreement would not create the gap. It would prevent its enlargement to our disadvantage. . . . The current arms race compounds numbers by technology. The Soviet Union has proved that it can best compete in sheer numbers. This is the area which is limited by the agreement. Thus the agreement confines the competition with the Soviets to the area of technology. And, heretofore, we have had a significant advantage (in technology [8]).

The alleged violations by the Soviets in replacing "light" missiles with "heavy" missiles can be evaluated only with the above understandings in mind. During the late-60s the Soviets deployed their third generation of ICBM, the SS-9s, SS-11s and SS-13s. Generally, these missiles were characterized by high throw weights necessitated by the ponderous single Re-entry Vehicle (RV) warheads technologically inferior to those of the United States.

The large-yield warheads were required to compensate for the inaccuracies of the missiles in attacking hardened targets. That a fourth generation of missiles was being developed should have been apparent from past deployment intervals and Soviet refusal to accept the definition of "heavy" versus "light" ICBM. Obviously, it would not have benefited the Soviet Union to sign an agreement which would have allowed only the deployment of missiles which their technology had not yet developed (and which would have precluded deployment of missiles nearing operational

capability).

Further, the United States was probably complacent with her technological advantages and failed to recognize the development of a Soviet MIRV capability. As a result, when the fourth generation missiles, the SS-16, SS-17, SS-18 and SS-19, were introduced, many people accused the Soviet Union of violating the spirit, if not the letter, of the Agreement. These missiles were all capable of delivering MIRVed warheads, CEP had been reduced from the .5 nautical mile (NM) of the third generation to .2 to .3 NM, throw weights of the SS-17 and SS-19 - designed to replace the SS-11 "light" missiles - were triple that of the SS-11, and warhead yields were doubled.[9] However, none of these developments violated the Agreement, but only a unilateral statement of understanding voiced by the United States.

Similarly, the deployment of the SS-16 land-mobile capable ICBM was debated. However, on 20 May 1972 the US delegation to SALT had withdrawn limitations on deploying land-mobile ICBMs by the following statement:

"In connection with the important subject of land-mobile ICBM launchers, in the interest of concluding the Interim Agreement the US delegation now withdraws its proposal that Article 1 or an agreed statement explicitly prohibit the deployment of mobile land-based ICBM launchers..."[10] Obviously, the Soviets did not desire to jeopardize the deployment of a strategic system nearing initial operational capability (IOC). They can only be accused of having greater patience than the US delegation, not of violation of mutual agreements.

Three of the alleged violations were strategically insignificant except that they violated strict compliance with the Agreements. Construction of the Kamchatka radar should have been undertaken only after agreement with the United States on its construction. However, its presence does not provide the Soviet Union with a strategic advantage and was perceived primarily as an administrative oversight. Similarly, the estimated 15 excess ABM launchers violated the exact terms of the Agreement, but did not in themselves provide for an additional significant ABM capability. The Soviets acknowledged their delay in dismantling old silos as they deployed SLBMs. The issue of alleged concealment was resolved when the activity was terminated following voicing of the grievance. The explanation for alleged construction of the special purpose silos was accepted by the United States as being for launch control facility construction which was not covered by the Agreement.

Currrently, controversy swirls around the number of nuclear powered ballistic missile submarines (SSBN) available to the Soviets. Limited to a total of 62 modern SSBN by SALT I, it is alleged that they have 64 operational and others awaiting sea trials. The offending SSBN are Delta-III Class SSBN which will carry a new generation SLBM, the SS-NX-18. The resolution of the problem is compounded by the vagaries of the Agreement which failed to define an "operational" SSBN. Further, had SALT II been consummated, the number of SSBN would have been moot for SALT II is expected to eliminate a numerical limitation in numbers of SSBN. This alleged violation of the SALT I terms occurred six months after SALT I was initially due to expire and given the long lead time in SSBN construction, the intent of the Soviet Union to willfully violate SALT I is questionable.

Soviet Advances Under SALT I

Surrounding the signing of the Agreements and their later ratification by the Senate was a storm of controversy over the wisdom of limiting US strategic nuclear forces. Questions such as "Who won?", "Does the Agreement perpetuate a US strategic disadvantage?", and "Does the Agreement jeopardize our future security?" were posed. Melvin R. Laird, Secretary of Defense in 1972 when SALT was signed, has since stated that the United States took a calculated risk in entering into SALT and that it was then recognized that if the Soviets were allowed to violate SALT they could stand to gain a potentially disastrous military advantage over the United States.[11] Henry Kissinger, on the other hand, always saw SALT as an initial attempt to reduce the threat of nuclear war and that that threat exceeded the risk involved in negotiated agreements.

Obviously, the Soviet Union has greatly expanded her strategic offensive force, while operating largely within the limitations of SALT. A recent study, published by the House Armed Services Committee, reaches some interesting conclusions about Soviet near-term capabilities assuming the Soviets will continue their improvements in strategic arms inside the SALT I terms. "That by 1980 or 1981, the United States will have lost a credible ability to deter a first strike by the USSR . . . depending upon Soviet re-entry vehicle warhead yield, 12 percent to 60 percent of the land-based Soviet Union re-entry vehicles could kill at least 75 percent of the US silos - 790..."[12] In a second study, the Congressional Budget Office concluded: ". . . the Soviet ICBM force - by 1985 - could deploy 6,654 warheads with an aggregate yield of 7,131 megatons compared to 2,154 US warheads and a yield of 1,216 megatons . . . (and) calculate that with an assumed 1,200 foot CEP, the Soviet ICBMs could destory about 55 percent of the US ICBMs."[13]

Richard Burt, a correspondent on national security affairs for the New York Times and formerly an Assistant Director for the International Institute of Strategic Studies, relates it in a different manner. "Given the esti-

mated yield of the separately targetable warheads atop the new ICBM (SS-16 through SS-19), the (simultaneous) attainment of increased accuracies will result in single shot kill probabilities (SSKP) of warheads against hardened targets like missile silos ranging from .54 to .99." A complete breakdown of SSKP is at Table I.[14]

during launch and therefore allows the silo to be reloaded and made operational within days.

As recognized during SALT negotiations, no qualitative restrictions were imposed on either nation's offensive force. While the Soviet Union has had to remove second and third generation missiles as fourth generation missiles were deployed, to meet quantitative limits, major qualitative advancements have been achieved in the new ICBM.

learned three lessons from SALT I that should be applied while negotiating SALT II. First, the Soviet Union will operate at the outer limits of the terms of any agreement. And why not? In 1974, after culminating the Vladivostok Accords, President Ford stated that the United States also had an obligation to build US strategic forces to the maximum allowed limits of the Accord because national security demands the retention of those forces necessary to maintain the equivalency agreed upon during negotiations. The Soviet Union surely perceives this same requirement.[15]

TABLE 1[16]

THE NEW GENERATION OF SOVIET STRATEGIC MISSILES

CATEGORY	TYPE	MAX RANGE (STATUTE MILES)	THROW-WEIGHT[1] (PAYLOAD IN LBS)	WARHEAD YIELD	SSKP[2] 1 RV	SSKP[2] 2 RV	NUMBERS DEPLOYED[3] FEB 78	COMMENTS
Intercontinental Ballistic Missiles	SS-16[4]	5,000	2,000	1 MT	.57	.81	---	SS-13 Replacement
	SS-17	6,000	4-6,000	4 X 800 KT[6]	.54	.78	60	SS-11 Replacement
	SS-18[5]							
	MOD 1	6,000	15-18,000	18-25 MT	.99	.99	100	SS-9 Replacement
	MOD 2			8-10 X 1 MT[6]	.57	.81		
	SS-19							
	MOD 1	6,000	6-7,000	6 X 1 MT[6]	.57	.81	200	SS-11 Replacement
	MOD 2			5 X MT	.91	.99		
Intermediate Range Ballistic Missile	SS-20[7]							
	MOD 1	3,000	---	3 X KT Range	---	---	---	SS-4/5 Replacement
	MOD 2			KT Range	---	---		

NOTE: Unless otherwise stated, the estimates in this table are drawn from Table I. **The Military Balance 1976-1977** (London: IISS), pp. 73-75.

1. These are estimates. See Edward H. Luttwak, "Strategic Power: Military Capabilities and Political Unity." **The Washington Papers** (Beverly Hills: Sage Publications, 1976) Table 2, p. 25 and Colin Gray, "The Future of Land-based Missile Forces", forthcoming Adelphi Paper, IISS, App 1.
2. This is the Single Shot Kill Probability (per warhead) against a 1,000 psi point target with accuracies of .25 NM CEP. Calculations done with the Boeing Aerospace Company's Vulnerability Assessment Calculator. These are representative figures. The existing CEP of these systems is uncertain, but probably range between .2 and .8 nautical miles.
3. Original figures are changed. These figures are derived from "Soviets Deploy SS-16 ICBM." Aviation Week & Space Technology, February 27, 1978, p. 15.
4. May be deployed in a mobile mode.
5. A third version of the SS-18 has been tested, reportedly with a single 15-megaton warhead.
6. Multiple, independently-targeted reentry vehicle (MIRV).
7. SS-20 consists of two stages of the SS-16 ICBM.

Other technological advances have been introduced by the Soviet Union. The most significant is probably the "cold-launch" technique of the SS-17 and SS-18 ICBM. The technique causes little damage to a silo

Conclusion

The United States should have

The second lesson learned should be the necessity to specifically define terms in measurable ways and to insure the ability to verify the stipulations. It does not benefit either side, in the long run, to allege violations which are based on unilateral or arbitrary understandings. Further, verification must be so positive as to prevent the Soviet Union from attempting to advance their capabilities through deception or concealment. Misunderstood perceptions, interpreted as attempts to violate the Agreement to gain a strategic advantage, could cause the Agreement to be broken and result in the aggrieved side doing anything to regain any advantage which was believed lost. Subsequent international repercussions could be more severe than a world without arms limitations.

Third, the United States must continue to develop and deploy strategic systems not limited by an agreement. The statements of former Presidents Nixon and Ford, quoted earlier, demonstrate that they obviously understood this need. The ABM Treaty was entered into largely in anticipation of Congressional refusal to fund ABM operations. Perception later became fact and the Treaty thereby allowed the United States to retain relative equivalency. Research, development, testing and evaluation (RDT&E) of other strategic nuclear systems was advanced during their presidencies. The B-1 bomber was selected as the most cost-effective follow-on to the B-52 bomber. Air launched cruise missiles underwent RDT&E and were planned for employment with both the B-1 and B-52. The Minuteman ICBM force was upgraded by improving the accuracy, reliability, command and control and versatility of the system. Further, silo hardening improvements were initiated. THe M-X ICBM program was under RDT&E. With improved guidance and increased numbers of highly accurate MIRVed warheads, together with a mobile highly survivable basing mode, it provided for prompt, high confidence counterattack capabilities against even the most sophisticated hardened targets. The Trident SSBN system, with increased SLBM launchers and its larger, more accurate, MIRVed missiles, was due to become operational in the 1979-1980 time frame. Additionally, the neutron bomb, a newcomer to strategic arms arsenals, was developed. However, in the past year all of these programs except one have been reduced or proposed for reduction, not through concessions gained from the Soviet Union, but through unilateral actions of the Carter Administration. Only the air launched cruise missile system has been advanced. The neutron bomb has not yet been relegated to a non-developed role only because of external political pressure placed upon the Administration.

Ultimately, the success or failure of SALT I must be judged with respect to both the military and political objectives sought. However, acrimonious discussions over past incidents do not serve any purpose unless they lead to future, more meaningful, understandings. SALT I was promulgated by two powers with divergent interests and philosophies who agreed to limit the armaments upon which their national survival depended. It was a major departure from past instances of resolution of problems through hostility and confrontation. A continuation of the spirit of accommodation demonstrated in SALT I negotiations is essential to SALT II. However, unless a SALT II agreement can be reached which will prevent misunderstandings and which will allow for irrefutable verification of compliance, world fears of a strategic nuclear conflict will not be appreciably reduced.

Footnotes

1. Ben T. Plymale, "The Evolution of U.S. Declaratory Strategic Policy," **Journal of International Relations,** Fall 1977, p. 242. Plymale is the former Deputy Director, Defense Research and Engineering for Strategic and Space Systems.
2. "Strategic Arms Limitation Agreements Transmitted to the Congress," **The Department of State Bulletin,** (Washington: Government Printing Office, July 3, 1972), p. 3.
3. "Strategic Arms Limitation Agreements Transmitted to the Congress," p. 9.
4. "SALT Violation Queries Confirmed," **Aviation Week & Space Technology,** 6 March 1978, p. 18.
5. William F. Scott, "Troops of National Defense," **Air Force Magazine,** March 1978, p. 56.
6. "President Nixon and Dr. Kissinger Brief Members of Congress on Strategic Arms Limitation Agreements," **Department of State Bulletin,** (Washington: Government Printing Office, July 10, 1972), p. 39.
7. Gerard Smith, "The SALT Agreements and U.S. National Security," **Department of State Bulletin,** (Washington: Government Printing Office, July 31, 1972), p. 149.
8. "Nixon and Kissinger Brief Members of Congress," p. 47.
9. Colin S. Gray, "Soviet Rocket Forces: Military Capability, Political Utility," **Air Force Magazine,** March 1978, p. 52.
10. "Strategic Arms Limitation Agreements Transmitted to Congress," p. 13.
11. Melvin R. Laird, "Arms Control: The Russians Are Cheating," **Reader's Digest,** December 1977, p. 98.
12. Edgar Ulsamer, "The Accelerating Momentum of Soviet Military Might," **Air Force Magazine,** March 1978, p. 37.
13. Ulsamer. "The Accelerating Momentum." p. 40.
14. Richard Burt, "Arms Control and Soviet Strategic Forces," **The Washington Review of Strategic and International Studies,** January 1978, p. 19.
15. Fred M. Kaplan, "SALT: The End of Arms Control," **The Progressive,** January 1978, p. 22. Kaplan is a Graduate Fellow in the Arms Control Project at the MIT Center for International Studies.
16. Burt, "Arms Control," p. 19.

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IPB FOR THE BATTALION - 2

by
2LT C. E. HOLLIDAY

Quite often, it is difficult to admit that you made a mistake. The intelligence community made one a few years back and we haven't adequately corrected it.

Most of the initial, and subsequent, talk about Intelligence Preparation of the Battlefield (IPB) revolved around some unknown point in the future; a new combat power symbology; microfiche map sheets; battlefield computers with instantaneous readouts .. All of this is very important and no doubt, at some point in the future, it will all be in the inventory.

So where's the mistake?

When you get out of the laboratories and away from Combat Developments and start talking to the tactical intelligence people who are, quite rightfully, more concerned with satisfying their commander's EEI tomorrow than "some point in the future," well, frankly all of this automated IPB stuff sounds a little like "Beam me up, Spock."

Even with all the waiting around for the "Enterprise," there has been some forward motion in the tactical application of IPB. XVIII Abn Corps and the 7th Infantry Division are the two units with which I am personally familiar. I know that at each of these units, IPB has been successfully used under field conditions, but the success of IPB in the field thus far at Corps and Division levels offers little solace to the beleaguered Battalion - 2.

A good IPB product requires countless hours of work. A tremendous amount of coordination between the 2, 3, Engineers, Staff Weather Officer and the exercise control group is also required. Fortunately, the manpower and technical expertise required to produce a good IPB product is already built into both the division, and to a greater extent, the corps structure.

Now for those people to whom this article is directed, the battalion 2s: Let's take a realistic look at your assets and how best to apply them to IPB. First we will find the battalion 2 himself (herself), a first or second lieutenant with anywhere from 0 to 4 years experience; the NCO, an E5 or 6 who may or may not have had any formal intelligence training; and, in the more opulent battalions, one or two EM, who may or may not have had any formal intelligence training.

IPB incorporates all facets of the tactical intelligence trilogy of weather, enemy and terrain (WET). We will begin with the enemy.

Doctrinal templates serve multiple purposes. They are relatively simple to make and when done on a 1:50,000 scale, they are small enough that there will still be room for you and your driver in the jeep. Finally, constructing doctrinal templates for a variety of contingencies, (offense, defense, MOBA, assault river crossing, etc.) will prove very educational for personnel with no formal intelligence training and at least a good refresher for any stray 96B that the division or brigade 2 shop hasn't

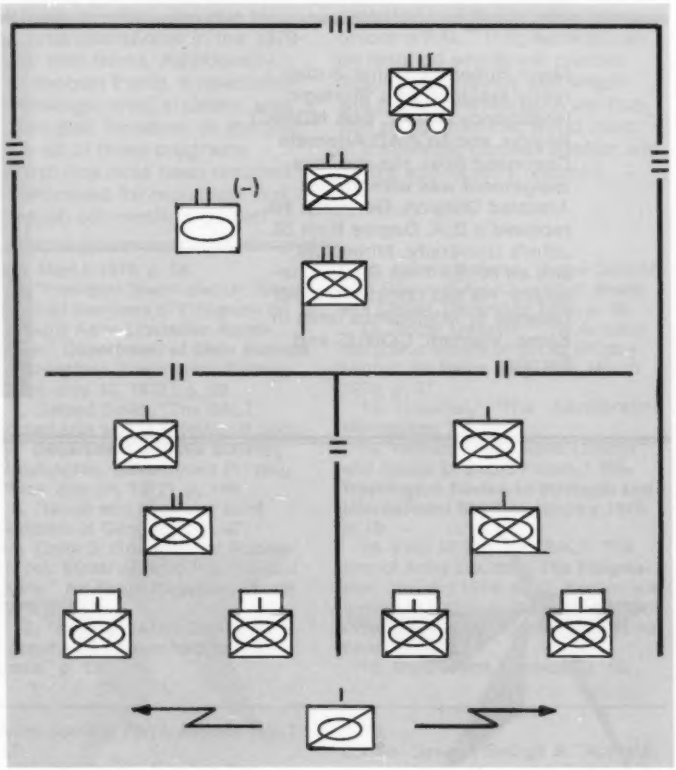

Figure 1. Doctrinal Template

managed to scoff up.

Doctrinal templates at the battalion level should correspond in size with the units which you would normally plot on your SITMAP: companies, battalions and regiments. Since OPFOR doctrine and tactics do not change nearly as rapidly as weather and terrain factors, doctrinal templates should be made with the idea of retention for further use.

Now, we'll look at weather. Work in this often overlooked or barely considered area can make a lot of points for the battalion 2 both in presentations to the commander as well as in the eventual outcome of the exercise or battle. This is also the one area which requires coordination between the battalion 2 and higher headquarters.

Since weather information is the most perishable of the WET trilogy, the number and type of weather overlays which will be practicable at battalion level will be directly proportionate to the amount of preparation lead time provided. As a minimum, I would suggest ground fog overlays with prevailing wind directions, cloud cover and some type of severe weather template (rain, snow, ice, dust, etc.).

Remembering that we must always have room in the jeep for both the battalion 2 and his driver, let's see what we've got at this point in the IPB process: six or so doctrinal templates done to scale (if you've kept in shape, these will fit easily into your fatigue shirt), and two or three weather overlays (affix them to your map sheets, you're going to have to take the map anyway).

Finally, we reach the most difficult and possibly (in terms of answering the commander's EEI) the most important aspects of IPB...terrain. Unless one of your enlisted men is a terrain intelligence analyst or you happened to be a geology major, you're not going to be able to do as accurate a job here as the 2 shops at division or corps.

C&GSC has developed a 13-step **Analytical Approach to Terrain Analysis and Allocation of Combat Power**. I will discuss the first seven steps at some length, briefly touch on 8 and 12 and leave steps 9, 10, 11, and 13 to the 3 shop.

The amount of out-of-house coordination you can perform will always depend upon your preparation lead time. If at all possible, request aerial photography to augment your map coverage. That wide open area on your 1960 series map might be an amusement park by now, and the densely forested, untrafficable terrain you're counting on might have four 8-lane highways running through it. Current aerial photography is the best you can hope for; you should employ every means available to get it.

On to the 13 steps. These can be performed with or without aerial photography.

1. "Identify terrain along the FEBA that disrupts lateral movement of attacking forces."

Be realistic in your performance of this step. The FEBA is not really that imaginary line that runs across the front of your battalion zone. Look for disruptive terrain 1 or 2 kilometers either side of the FEBA.

2. "Identify avenues of approach that exist between the disruptive terrain."

On this point, C&GSC and I differ slightly and since I'm writing this article, we'll go with my working definition: "Identify *mobility corridors* that exist between disruptive terrain."

I define a mobility corridor as terrain that will allow a unit to deploy in it's doctrinal, tactical formation for one of it's doctrinal options (breakthrough, meeting engagement, pursuit, etc.). Thus, two adjacent battalion size *mobility corridors* would comprise a regimental *avenue of approach*.

3. "Identify likely enemy objectives."

Don't make these up. If no

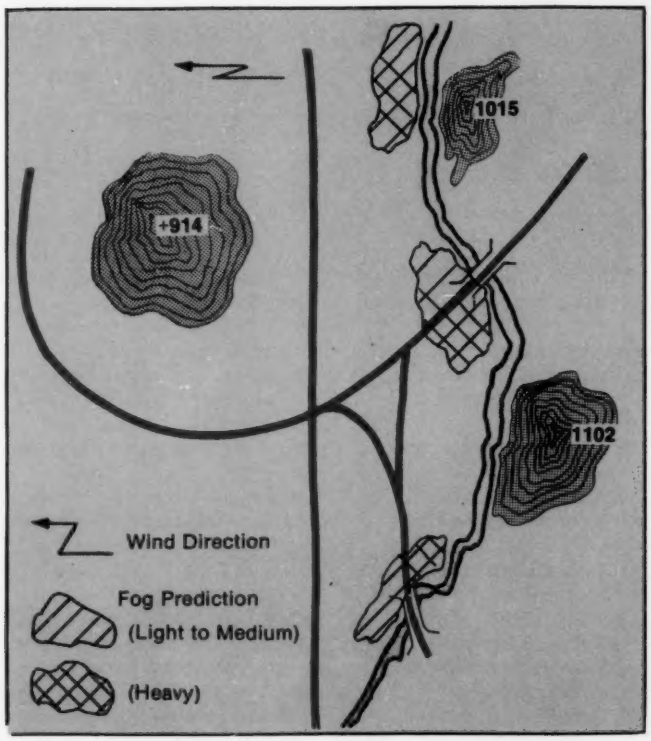

Figure 2. Ground Fog Overlay.

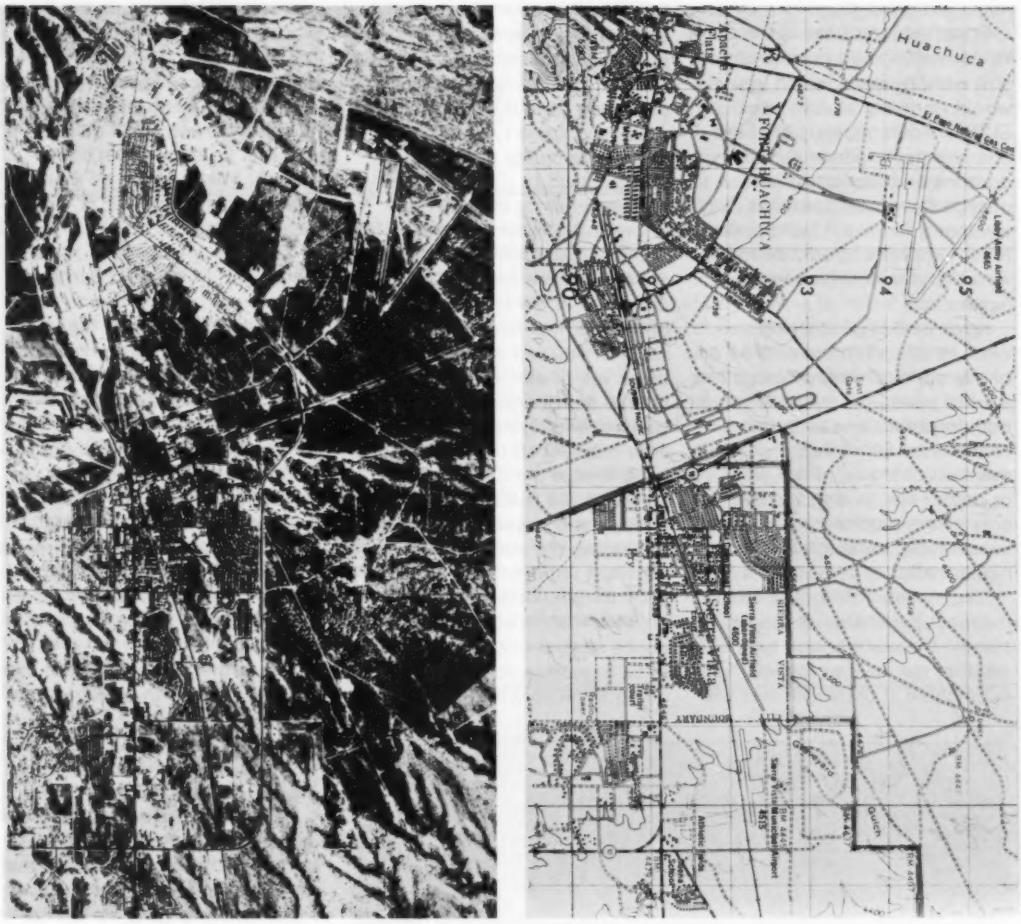

Figure 3. Aerial Photograph to Augment Map.

likely enemy objectives exist in your zone, you can skip this step.

4. "Identify blocking terrain on both sides of the FEBA."

Blocking terrain is any terrain condition (slope, water, soil condition, vegetation, built-up areas, mines, man-made obstacles, etc.) which denies the enemy the use of its wheeled and/or tracked vehicles in their doctrinal role, without the use of engineer support.

5. "Extend avenues of approach identified in step 2 along the shortest routes which cross the least amounts of blocking terrain."

Once again, C&GSC and I disagree on semantics, I'd say: "Extend *mobility corridors* identified in step 2 along the shortest routes which cross the least amounts of blocking terrain. This is as simple as it sounds.

6. "Refine avenues of approach."

Now we group those mobility corridors into avenues of approach. Analyze each avenue, paying particular attention to width, directness and length. Finally, rank them according to the size unit each will support, (1 for battalion, 2 for regiment, 3 for division, or use some other fiendishly clever numbering scheme of your own).

7. "Identify key terrain."

After carefully studying the map and working through the first six steps, this should take very little time.

8. "Arrange enemy offensive doctrine to conform to the avenues of approach identified."

Remember those doctrinal templates? Take them out from under your shirt and place on the map. From the "picture" you're looking at now, develop a "situational template" (a doctrinal template with terrain constraints applied). Put them all back under your shirt; if you've done your work properly, that situational template can become a tremendous targeting tool!

9. (Let the 3 do this) "Convert the size enemy force on each avenue of approach to US equivalents, (1.5:1; Motorized Rifle

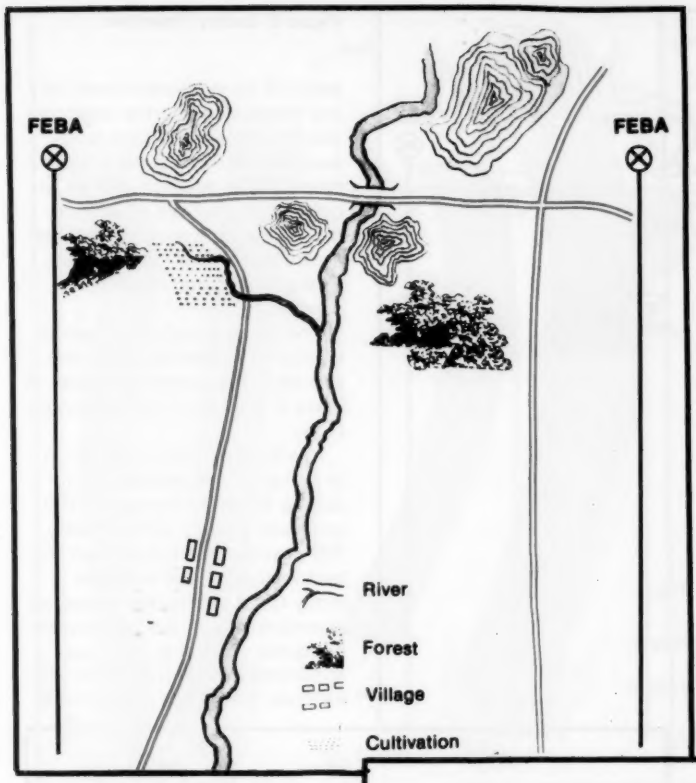

Figure 4. Basic Map.

Division 11 US battalions; Tank Division 9 US battalions)."

10. (To the 3 again) "Determine the combat ratio that is acceptable in the covering force area (1:6), the main battle area (1:3) and the rear area (1:3)."

11. (Still the 3) "Allocate to each avenue of approach the number of battalions that will satisfy the combat ratio found to be acceptable."

12. (Take the templates out again) "Conduct risk analysis if the requirement for combat power exceeds availability."

This is where you'll make your money. Step 12 should be nearly exactly the same as paragraph 12 of the INTSUM, (the conclusion paragraph), only this will be graphically portrayed.

13. (Put the templates back, this one's for the 3) "Allocate command and control headquarters based upon the number of battalions allocated to the covering force area (CFA) and main battle area (MBA)."

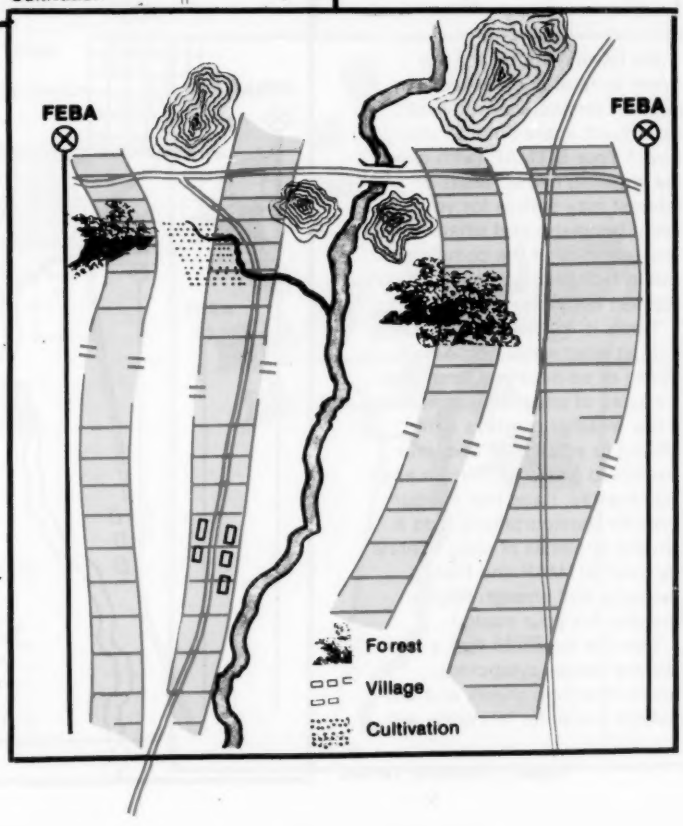

Figure 5. Mobility Corridors.

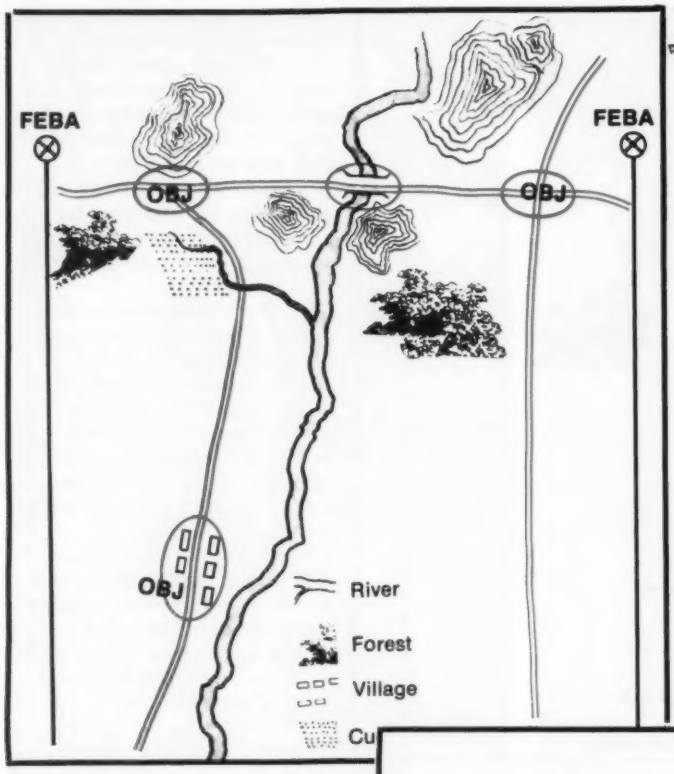

Figure 6. Enemy Objectives.

prove to be invaluable once they are introduced into the inventory and thoroughly tested. I in no way intend to slight the importance of the research and development people. We all realize that every innovation which they create makes our job, and our final product, that much more precise.

The entire point of this article is to reinforce the fact that IPB and all of the assets necessary to make it work are in the inventory today.

Intelligence units, from corps to battalion are capable of producing timely and accurate IPB products. I firmly believe that IPB provides the 2 shop with the best analytical tool available today for providing the maneuver commander with the information he needs in order to fight outnumbered and win..which is why we draw that check every month.

We haven't addressed the event template or the decision support template as yet. Well, how much spare time do you have? Your SITMAP (with overlay showing named areas of interest may suffice for your event template) and whatever you use to brief the commander will in fact become your decision support template.

That's it. You're finished! Let's look at what we've got. A half dozen or so doctrinal templates, a couple of situational templates, a few weather overlays (still affixed to your map) and your combined obstacles/terrain analysis overlay, (tape this to your map for transportation), add a couple of pieces of clear acetate for your SITMAP and there's probably still enough room in the jeep for your cooler!

There is no doubt that a new combat power symbology, microfiche map sheets and battlefield computer terminals will

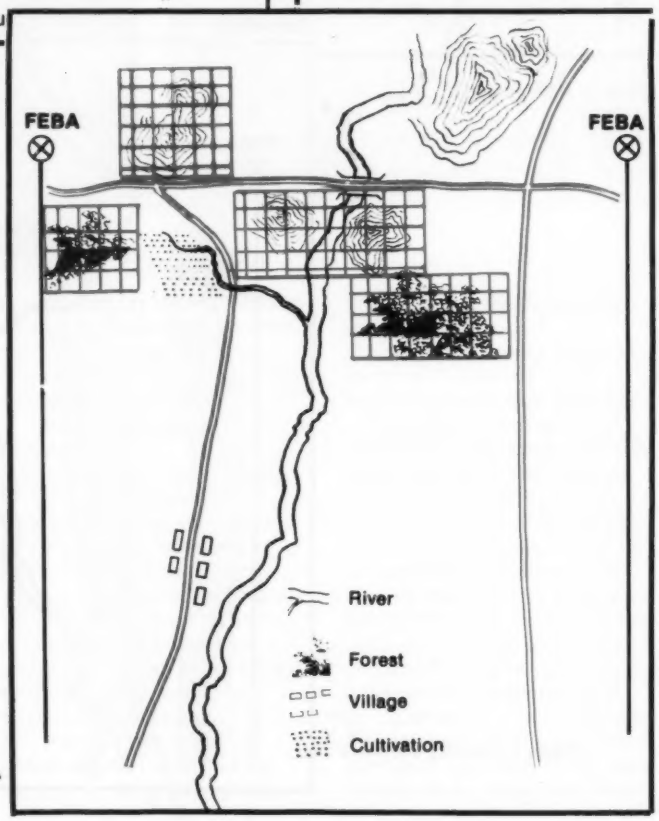

Figure 7. Blocking Terrain.

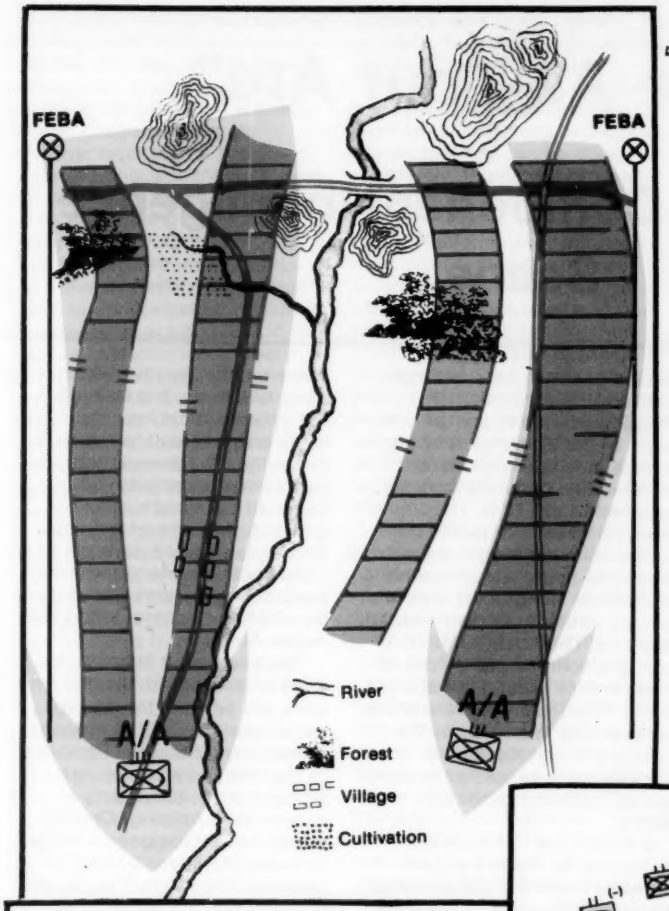

Figure 8. Avenues of Approach.

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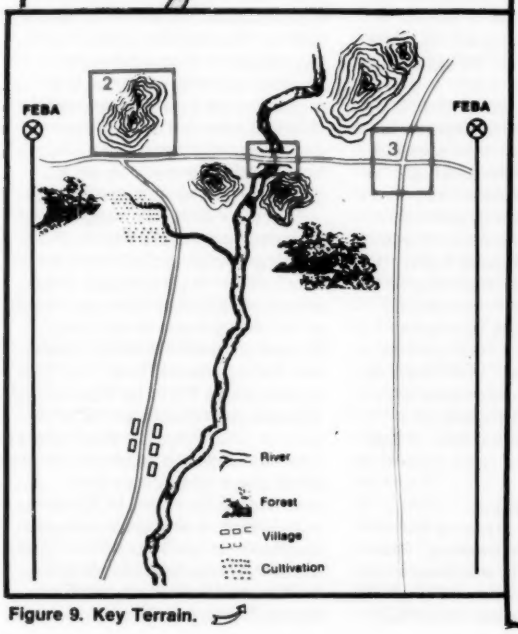
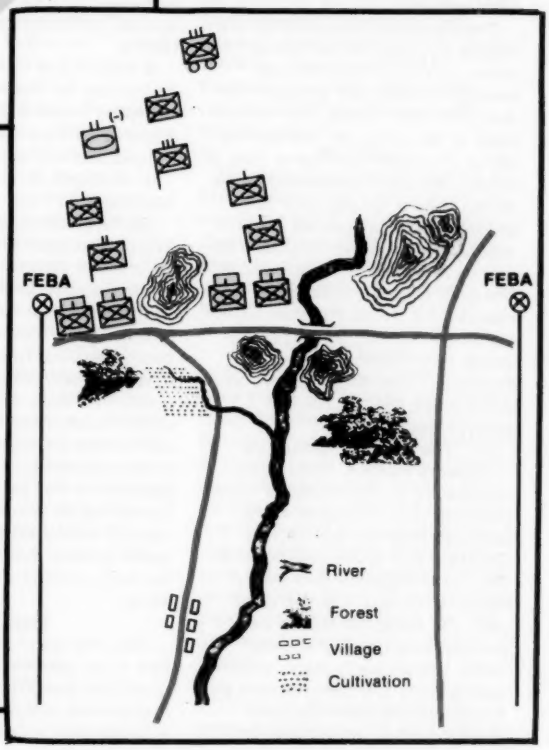


Figure 9. Key Terrain.

Figure 10. Situation Template.



RESERVE

"Come As Your Are"

The Reserve Component Intelligence Scene

by
COL Andrew M. Rutherford

Most active military personnel, if they were like me, really do not have a true picture of our Reserve Forces, but probably a stereotype of "weekend warriors" milling around an armory on weekends. This is more a case of "out of sight, out of mind," rather than a lack of concern. Those of us who have had contact with National Guard or Reserve units on exercises have more than likely felt a degree of apprehension about depending upon "part time soldiers."

The Reserve Components are almost the size of the Active Army, having an authorized strength of 665,307 (present for duty 535,679 - 1 Sep 78). In the case of MI units, we are talking about 78 major (company size or larger) MI units compared to 44 in the Active Forces (not to mention 56 strategic MI detachments of which the Regular Forces have none). In other words, the bulk of our intelligence resource is in the Reserve Components. Further, all but three aerial surveillance units are Reserve. (This drops to two in June when the 1st AS Co deactivates.)

The Reserve Structure

Reserve Forces, commonly referred to as the Reserve Components (RC) are so named because they consist of two separate and quite distinct entities -- the Reserve and the National Guard. For the most part, the National Guard has combat and combat support units. Within each state, established units are commanded by The State Adjutant General (TAG), who is appointed (or elected as in the case of South Carolina) by the Governor. These forces are under the command of the Governor until such time as they are federalized. Some Active Army advisors are assigned to the TAG. The Reserves, where 99 percent of the MI units are found, are organized under Army Reserve Commands (ARCOMS) with command over numerous disparate units. These ARCOMS, in turn, are commanded by one of three Armies (First, Fifth and Sixth). The Reserves are advised, assisted and inspected by the Armies through Readiness Regions, Groups, assigned personnel and various special teams.

A part of the Reserves not controlled by the Army Commanders is the Individual Ready Reserve (IRR) -- all of those individuals not assigned to units. The strength of the IRR is about 180,000.

We have all heard of the "One Army" concept. The Reserve is an integral part of it. In some cases Reserve units flesh out Active divisions (round out units). Some Reserve units are designated for quick mobilization to deploy with Regular Army units. The bulk of the Reserve MI units mobilize fairly quickly as part of the CONUS reinforcement capability. Unlike contingencies in the past, the Reserve Components are expected to rapidly take their places, in a ready stance, beside their Regular Army brothers (and sisters) in arms.

Training

The end-all of Reserve activities is, of course, training. The quality of training will determine the combat efficiency of a unit in a contingency. Many other factors are naturally involved in a unit's readiness, but training is not only the most important, but is the least difficult to influence. Basically, the Reserves train during two major periods -- one weekend per month and two weeks during annual training. This equates to 38 days per year. This must be understood when considering Reserve Component capabilities as compared to the Active Army.

There are other training devices where individuals and even units will perform training for longer periods, and at various times during the year. Personnel in the IRR, in particular, are brought on to active duty to receive their training. Certain personnel are assigned mobilization designee positions which they would occupy in a general mobilization. These people perform an annual two week training period in these positions. Another training mode is the multiple unit training assembly (MUTA) where a unit will conduct several assemblies (four hours) back to back to gain greater training continuity.

The crux of MI training is knowledge of one's MOS. MOS training is conducted in three ways. First, the individual may attend an MOS producing course at the Army Area Intelligence School (run by Reserve personnel during the summer months) as well as at Fort Huachuca/Fort Devens (USAICS/USAISD) for several courses. Correspondence courses and unit schools are the other ways to achieve and improve MOS skills. MOS skill acquisition is a crucial part of the Reserve training effort. There are shortfalls in the hard skill MOSs, particularly in the Electronic Warfare field.

The Army Intelligence Schools not only teach MOS producing courses, but also several general intelligence, intelligence management and language courses. The language courses are refresher type, which the Defense Language Institute does not conduct. These schools are conducted during the summer months in each CONUS Army Area to fit in with annual training. Intensive efforts have been made to concentrate the courses in order to award an MOS in the shortest possible time. Where this used to take up to four years (by which time the individual tended to lose interest and/or ETS, under a new program introduced last year, MOS training may be accomplished within one year. This was achieved by compressing, purging (using Skill Level 1, in most cases, as a criterion) and lengthening each course phase from two to three weeks. The total course has been reduced from eight weeks (four two-week phases) to six weeks (two three-week phases). It will now be up to the unit to conduct additional training to raise individual skill levels and/or fill educational gaps between course phases. The really hard skill EW MOS cannot be acquired through CONUS Army Intelligence Schools. Either a previously trained prior service person must be recruited (most are obtained in this way), or the individual attends a Regular Army course for the required number of weeks. This is, and will continue to be, a problem area.

Starting this year, USAICS has taken over the operation of the Reserve School at Fort Devens, which teaches the various EW-related MOS. All Army Areas send students requiring EW skills to this school. Reserve personnel will contiue to operate the school. Specific Reserve courses taught at Fort Huachuca will be conducted by ADT personnel, although the regular faculty will assist as required.

The Intelligence School system, both Active and Reserve, is essential to the training of Reserve intelligence units. I might add that Regular Army and other service active personnel make use of these schools. (The First US Army Intelligence School at Fort Bragg, as an example, has about a 20 percent Active Army enrollment.)

On-site training and correspondence courses are other avenues to achieving or improving skills. They can be done separately, together, or in conjunction with the CONUS Army School Program. There is a great deal of initiative and self discipline required on the part of individuals to obtain intelligence skills. These individual and unit programs can be greatly influenced by aggressive training management and command emphasis on the part of the unit leader. In fact, one of the biggest factors in retention (a major problem area) is whether meaningful training is conducted by the unit.

Another highly visible and very productive aspect of training is conducted overseas. OCONUS (for out of Continental United States) training primarily involves designated reinforcing units for Europe and is often conducted in conjunction with the annual REFORGER Exercise. This affords the MI unit an opportunity to operate in a realistic environment in a possible future area of operations. This training is both highly motivating and a major factor in enhancing recruiting and retention.

Dedicated MI Training Programs

What I have discussed previously in the way of training applies to the RC as a whole. Many training programs which are unique to intelligence units are designed to squeeze as much effective contact-type training as possible out of the few days available to a Reserve intelligence unit. Some of the programs such as REDTRAIN (formerly Peacetime Utilization), Direct Association (DAP) and OCONUS training are not limited to MI units. Other programs such as SPOTLIGHT and Opposing Forces (OPFOR) are Active Army programs as well. Nevertheless, the following listing of RC MI training programs is impressive.

MI-JAM
MI-HAWK
MI-TRAIN
MI-TALK
Mutual Support Program
Live Environment Training (LET)
SPOTLIGHT
OPFOR
Intelligence Army Area School (ITAAS) FORSCOM Intelligence Training Detachment (FITD) Training for RC Intelligence Planning Conference (IPC)

DAP REDTRAIN

A detailed exposition on each of these comprehensive training programs would tire the reader, however, a short explanation and status report will give a suitable picture of the incredible efforts made by the RC to make themselves combat ready.

MI-JAM

Programs carried out during annual training whereby the 138th Aviation Company (Orlando, Florida) provides jamming support for maneuver brigades. This program has been in existence for two years. Due to support for Reserve and Active Forces alike, the 138th received the Excellence in Electronic Warfare Support Award for 1978.

MI-HAWK

Until 1979, this three year program involved the 158th and 159th Aviation Companies of the Georgia Army National Guard. Photographic, IR and SLAR Imagery was provided RC brigades while they were in the field during annual training. The 24th MIBARS (Reserve) processed, interpreted and delivered the film. This year the Air National Guard is also being requested to fly aerial surveillance support.

MI-TALK

Reserve linguists supported an MP exercise (GOLDEN PISTOL) involving 1,200 "POWs" by conducting interrogation. This program had mixed results as languages were not involved, but interrogation procedures and techniques were practiced.

MI-TRAIN

This is a new program in its pilot stage. It involves the integrative training of an RC with an Active MI unit of like TOE. Major AC units have responded favorably to the proposal. During AT 79 one or two units will conduct one of several possible integralive training modes. With favorable results, the program will be developed further. This particular program promises, thus far, the greatest training efficiency for the RC.

DAP

The Direct Association Program matches an MI unit with a

RC combat unit -- division, brigade, ACR. These units, as opportunity permits, train in a unified mode both during weekend drills and annual training. These units will be slated to mobilize and deploy together.

MUTUAL SUPPORT PROGRAM

The Mutual Support Program matches a Reserve MI unit with an Active unit in a mutually supporting role. This is a year-round connection, but does not necessarily mean the units deploy together or are slated to work together in a contingency. Both FORSCOM and REDCOM and Reserve MI units (the 372d MID with FORSCOM, and the 310th MID with REDCOM) have mutual support agreements. Many of the strategic MI detachments also are in a mutual support role.

REDTRAIN

The REDTRAIN Program is an extremely active program wherein, for the most part, EW RC units work with active agencies on actual missions. What better training can we ask for?

LET

Live Environment Training ties in very closely with REDTRAIN. The units involved are normally used on Active missions with any of the services or national agencies. It is best not to go in any further detail with either REDTRAIN or LET. Suffice it to say that a twin benefit is achieved — the best training available in peacetime, and conduct of actual operations.

SPOTLIGHT

SPOTLIGHT is an Active Forces training program which was initiated in Europe as FOCUS. Essentially SPOTLIGHT uses possible geographical areas of operation for a unit to incorporate in its training. Real weather, terrain and forces are considered. A pilot program is now in being for the RC. On a trial basis, one or two Reserve MI units will be working with Active Army divisions in developing SPOTLIGHT data and participating in training. If the pilot program shows good results, then it will be expanded.

SMEE

The SMEE has been conducted for two years both by FORSCOM and First Army. Object of the SMEE is to allow Reserve Forces to see communist weapons and equipment. The FORSCOM SMEE is a "movable show" wherein a team brings small arms to various RC AT training sites. In 1977 First Army did the same and in 1978 put on a static show at Fort Drum, New York, which included wheeled and tracked vehicles. The SMEE is a good idea, but produced rather meager results compared to the time, expense, and effort involved.

ITAAS

The ITAAS dates back to just after World War II when these schools were established. MOS school training is essential to the RC and the ITAAS fulfill this need admirably. Updating of skills is also a major ITAAS function. The faculty and staff of the three ITAAS are Reserve officers, brought on ADT for the AT period. This year, USAICS is getting into the Reserve act and is offering courses for RC virtually year-round. USAICS, also starting this year, is conducting all EW RC training at Fort Devens, Massachusetts. In a move to standardize training, make it more effective and save money, several courses other than the EW skills are only taught at USAICS. I look to see this trend continued.

FITD TRAVELING TEAM

This FORSCOM Team, based at Fort Bragg, presents classes to RC mostly during IDT throughout the year (on a variety of subjects to include the conduct of a CPX). Each RC unit has its choice from the menu offered. It is up to the unit whether it desires the training, when it wants it and what it wants.

IPC

The Intelligence Planning Conference (IPC) is held on an annual basis and is extremely important as a management vehicle for the CONUS Army Intelligence Chief. There are several important tasks that are accomplished. Training planning and scheduling is conducted on an informal ad hoc basis. Where most intelligence units are in a support/assistance role, it is imperative that the concerned parties meet face to face and agree on their various requirements. What would take months by letter/phone is finalized in a few hours. The latest information concerning intelligence trends, developments and functions as well as data concerning specific RC programs, training, personnel actions and other matters is presented. As an example, presentations at the First Army IPC ran the gamut from a Threat Briefing by the Deputy DCSI, USAREUR, to an update talk on OPFOR by the Chief of the OPFOR Training Team from Fort Hood. Not to be underestimated is the great value of members of the RC intelligence community meeting together and getting to know each other. Since its inception in 1977, the IPC has grown in attendance and significance, becoming the CONUSA's single most important management and training tool.

SOME PROBLEMS

The most worrisome problem facing the Reserves is, unfortunately, something that they can do little about, even though a vast amount of time, personnel and resources are spent trying to ameliorate it. This problem is shortage of people in the Reserve Components. Not as immediately apparent is the steady shrinkage of the Immediate Ready Reserve (IRR), those members of the Reserve not assigned to specific units. Most are in the IRR as a result of having been drafted and are serving their residual obligation of four years. Nineteen seventy-eight marked the end of such obligations. We can look to further reductions of the IRR. In the Active Reserve and National Guard units the situation is bleak. Unit strength in many cases is at or below the combat capability point (75 percent). Also, shortages exist in vital areas such as the squad infantry strength and in hard core MOSs which require long training times.

Political decisions and actions will have to be taken to make this desperate situation any better. The spinoff from lack of strength compounds the already serious problem. Discipline and standards suffer to "help" retention. Training suffers as a result

of resources being diverted to recruiting.

Hard skill MOS fill is dangerously low. For those MOS which require lengthy training time, the person has to be able to go to an Active Army school for many weeks, an action few but the unemployed can do. Alternatively, the individual may have previously acquired the MOS while on active duty. These people are becoming more scarce as the end of the draft recedes further into the past. Another alternative is to train personnel over a long period of time utilizing his two weeks annual training period each year. This has had disastrous results, as more often than not, the individual drops out of the Reserve before he is MOS trained. After all, he cannot make rank if he is not MOS qualified -- and that might be four years in the future! In the intelligence community we have tried to speed the process up by compressing and accelerating MOS producing courses and leaning heavily on in-unit training. Thus far we have cut time, in some cases, from four years to one calendar year, utilizing Skill Level 1, in most cases, as our standard. It isn't a perfect solution, but it is a big advance.

Equipment, even in the Regular Forces, is not always the latest available. In the Reserve component intelligence units, particularly the EW, it is abysmal. Some equipment dates back to the 1940s! It is ironic that some equipment is so old that Reserve personnel cannot be trained on it at Active schools. They train on "new" equipment and then return to their unit to have to learn all over again on the older gear. Also of serious consequence, is that in the event of deployment, Reserve units' equipment will, in some cases, not be able to interface with the Active Component equipment. The obvious answer to this particular dilemma is money. We need to give the R&D cycle a kick in the tail to reduce the present completely unacceptable long lead times (seven years).

The above leads one to ask, "Well, just how ready are the Reserves? Can we depend upon them in case of war?" The answer is, "Not as ready as we would prefer to have them." The nature of the Reserve Component animal is such that it is number 2 on the priority list for equipment, its strength is dangerously low and training only several days a year precludes a unit being ready for combat upon mobilization, or even very soon thereafter.

On the other side of the coin, the Reserve Components have an extraordinary array of talent and dedication. Their numbers are equal to the Active Army and their very presence means an Army that can almost immediately expand to twice its size. Some intelligence units are even now actively engaged in the same type operations as they would be during hostilities.

A LOOK INTO THE '80s

The RC intelligence structure is due to be completely changed with the advent of the Combat Electronic Warfare Intelligence (CEWI) organization at corps level and below. In essence, all of the battlefield intelligence capability is to be fused together under the commander at each level from separate brigade through corps. This restructuring, which will begin, in the Reserves, during 1981 will increase the number of intelligence personnel by about 20 percent and amalgamate separate combat intelligence, EW, CI and LRRP activities under one MI commander, who, in turn, works under the staff supervision of the G2/S2. Without a doubt, CEWI is a progressive and long overdue organizational-functional concept. Its immediate effect upon the Reserves will be severe, however. More slots will mean more people to train, retrain and cross-train, for we are dealing with a multidiscipline requirement for many of the personnel involved. Additionally, there is a requirement for greater numbers of hard skill MOSs. These training requirements will exacerbate an already marginal training situation. Further, it appears that there will be a cross pollination of Reserve and National Guard units in order to populate the CEWI structure. Although originally unintended, I cannot think of a better fall out from an action. Conversely, it is sobering to contemplate the completely new array of equipment that goes with CEWI, when Reserve units now are using mostly obsolete equipment (the GLQ-2, as an example, from the 1940s). This is all to say that the Reserve intelligence community is facing a monumental challenge to make itself battle effective as we move through the door into the 1980s.

Very candidly, without some form of national service the Reserves are in jeopardy as a force to be strongly counted upon in the first stages of a conflict. I am speaking only from an intelligence standpoint, but I believe the situation is general. The Reserve system is based on requirements that existed prior to World War II, when more time for Reserve Forces deployment was anticipated. We no longer have the luxury of time. In some instances, Reserve units are expected to deploy in days and some are round-out units expected to deploy with a Regular Army division. In essence, there will be little time to bring Reserve units up to snuff following mobilization. This fact dictates a different Reserve concept. Some steps have already been taken, such as the placement of Active Duty personnel in Reserve units. It may be that Reserve units should be quasi-active units, with the hard skill personnel all on the Active roster; or, we may want to go to cadre type units as a distinct category. A third alternative is the use of the Reserves as a MOS replacement pool (as with the Mobilization Designees). For that matter, all of these modes could be used in combination.

In closing, I would like to stress two things. First is the tremendous resource that this nation has in its highly dedicated and motivated Reserve Forces. Second, that there are great changes in store for us all, both Active and Reserve, in regard to the structure and functioning of our Reserve Forces.

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The Next War in Europe!

By CPT Christopher Lingar

The stirring in the seats finally subsides as the Marshall enters the briefing room. Each officer comes to attention as their vaunted commander approaches the lecturn. They take their seats and await his words.

"Gentlemen, this is the moment you have been waiting for. Our next parade shall be held in Mainz. You have done well. Your soldiers are disciplined and well-trained. They will soon be fighting a war supported by the stirred military spirit of our citizens. It is to our benefit that we will carry the war upon hostile soil, though the enemy will be aroused in defense of his homeland and will be fighting with his most sophisticated weaponry. We shall counter with speed and mass. The spirit of our adversary will be depressed and victory shall be ours!"

With the Marshall's final words the assemblage breaks into a thunderous cheer, only subsiding after he lifts his hand for silence. "Each of you knows his duty and have rehearsed the plan of action. My Chief of Staff shall again briefly cover the important points of that plan to insure that we are prepared to conduct our operation with flawless execution."

The Chief of Staff now approaches the lectern. "To date we have deceived the enemy into believing that the shifting of our forces is only part of normal maneuvers. Our forces are now massed upon the decisive point of the front. On the morning of the 8th we will strike his ill-prepared forces and drive to Mainz, our objective. Our intermediate objective is the location of his reserves, artillery trains and logistics center, short of Mainz. Though I refer to terrain objectives, remember, our true objective is the total destruction of his forces in the field."

"During the initial stages of the battle I expect us to move quickly. Once he has had time to react each of you can expect to find yourselves colliding with forces on the march. When this occurs halt your advance guard, in order to fix the enemy, and then quickly concentrate the majority of your troops in the direction which is best suited for destroying the enemy and continuing your march to the objective."

"We have attempted to obtain precise information on the enemy's proceedings, but we could possibly encounter unforeseen difficulties. He may find it possible to place a strong force between us and our objective, if so, you have practiced the destruction of such a force. First, throw his troops into confusion by a heavy barrage of artillery. Then, pierce the enemy by massing troops, in successive echelons, upon the decisive point. Make a vigorous advance on his position, supported by masses of infantry. Reliance on the combined use of all arms will be crucial for success. Finally, once his line is pierced, execute the pursuit boldly. During the pursuit direct your actions against the flanks of his retreating forces. Make an attempt to place your troops, or an impassable obstacle, between his fleeing forces and their destination."

"Some of you have expressed concern for the number of river crossings we will encounter. They will present little difficulty if you conduct them as planned. First, deceive the enemy as to the point of passage. Then, secure the far bank with a force of infantry, in order to silence any direct fire which might be brought to bear on the crossing point. Insure your operation is well covered by the fires of your artillery. Finally, once this is accomplished, cross with your heavier equipment. I must stress again that this operation must be conducted with all possible speed."

"Since artillery is important in all of our operations I will mention a few points concerning its use. Concentrate your fire where the decisive blow is to be struck. Devote approximately one third of your artillery to the destruction of the enemy's guns. Remember that we now have vast quantities of highly mobile artillery. Insure that it follows closely behind your lead units in the attack."

With those words Colonel Antoine Jomini steps off the stage and turns the podium to his commander, Marshall Ney.

No, this was not a hypothetical battle plan of a Soviet advance into western Europe. It was an attack, in 1805, from France into Germany, as might have been conducted if planned by the tactician, Antoine Henri Jomini. He was the Chief of Staff for Ney and was later, in 1813, the aide-de-camp to Alexander I.

Soviet tactics today strongly reflect the writings of such military writers as Jomini, Karl von Clausewitz and Aleksander Vasil'evich Suvorov. Their tactics and their terms have in large part been adopted by the Soviets. As professional intelligence personnel, we must become better acquainted with the works of these tacticians and strategists to better understand the Soviet soldier in combat. It is possible that there will come a time when we will see a force which has stepped out of the pages of our reading!

LOGIT

A Method for Estimating Enemy Courses of Action

By MAJ Hugh M. Spall
USAR

Commanders have a continuing requirement for timely and accurate intelligence. The ability to generate this intelligence has grown in recent years as a result of improved techniques for collecting and recording battlefield information. Further improvements are possible as a result of technological advances which have reduced the cost, size and maintenance requirements of computer systems. As a result, computer assisted analysis of battlefield information should be seriously considered.

Computers can improve the analysis of battlefield information by reducing the subjectivity present in an analysis of the enemy's most probable course of action. An analyst estimates the enemy's course of action by the enemy's current activities. For example, if the enemy is going to attack, he must conduct reconnaissance and mass his combat power. To defend in place, he must construct field fortifications and antitank obstacles. To delay, he must leave his defensive positions before becoming decisively engaged. If he will withdraw, he should displace his command posts to the rear. Unfortunately, available indicators seldom all tell the same story. Some may suggest that the enemy will attack while others point to different courses of action. The analyst responds by weighing each indicator and examining the frequency of its occurrence. Based on these two factors, the analyst estimates the enemy's most probable course of action.

The disadvantages of this procedure are well known. Subjective weighing makes it easy to disregard information which does not fit preconceived ideas about enemy intentions. As a result, commanders can be unpleasantly surprised. The Battle of the Bulge and the Chinese intervention in Korea are good examples of surprise resulting from the subjective weighing of battlefield information. In each case, numerous indicators of a change in enemy intentions were discounted because they contradicted prevailing opinion.

More objective techniques for intelligence analysis were not available in past conflicts. In the late 1960's, however, advances in statistical theory made techniques for computing objective weights available, but their use was precluded by the degree of computer support required. Recent improvements in computer technology now make consideration of these techniques worthwhile.

One technique is the logistic probability model, commonly called the logit model. Developed to analyze choices among alternatives, the logit model measures the degree of association between the choice of a particular alternative and a set of indicators associated with that alternative. Weights are calculated for each indicator based on this degree of association. The statistical procedure used to perform these operations is known as "maximum likelihood estimation." Weights produced by this procedure are most likely to have produced the given set of example observations and are then used to form equations estimating the odds of a choice when a given set of indicators is present. The odds can be converted to probabilities by a simple mathematical operation.

The military application of this procedure is obvious. The enemy commander has four choices open to him: attack, defend in place, delay or withdraw. Each is associated with particular intelligence indicators. By examining past patterns of behavior, the computer can measure the degree of association between courses of action and groups of indicators and form equations predicting the odds of given courses of action when given groups of indicators are present. The predicted odds can be converted to probabilities. The equations will remain valid as long as the enemy fights as he has in the past. Even if he changes his tactics, the computer can generate new weights. All it needs are observations of the new methods.

A six step procedure is necessary to apply the logit model to the battlefield. First, the intelligence analyst must identify indicators for each enemy course of action. These indicators will differ for different types of conflict. Indicators used for analysis in a general war may differ from those used in a limited war. Major George Livingston has suggested a set of indicators for use in a mid-intensity limited war which could serve as a useful starting point for a field test of the model (see Table 1).

The second step involves the selection of a time period for analysis. The time period may be

Table 1
Indicators of Enemy Actions

Attack

Massing of enemy elements, tanks, artillery, and logistical support.
Deployment of combat elements in echelons.
Forward units deployed on narrow fronts.
Concentration of mass towards the flank(s).
Artillery positions well forward.
Dispersal of tanks and self-propelled guns to forward units.
Displacement of command posts forward.
Establishment or strengthening the counterreconnaissance screen.
Enemy troops located in forward assembly areas.
Increased patrolling.
Increased air reconnaissance.
Increased and systematic air bombardment.
Demonstrations and feints.
Drills and rehearsals being conducted in rear areas.
Increased activity in rear areas.

Defend in Place

Extensive preparation of field fortifications.
Establishment of strong antitank points.
Attachment of antitank units to front line defensive units.
Preparation of alternate defensive positions.
Employment of roving artillery.
Large armor units located in assembly areas well to the rear.
Preparation and occupation of successive defensive lines.
Dumping of ammunition and engineer supplies in forward areas.

Delay

Withdrawal from defensive positions before becoming heavily engaged.
Successive local counterattacks with only limited objectives.
Counterattacks being broken off before positions restored.
Maximum firepower position forward, and firing initiated at long ranges.
Frontages up to four times that normally assigned in the defense.

Withdrawal

Maximum firepower forward and firing initiated at long ranges.
Displacement of command posts rearward.
Displacement of artillery rearward.
Systematic destruction of bridges and communications facilities.
Withdrawal from defensive positions before becoming heavily engaged.

*Major George Livingston, "QUILT: A Quantitative Approach to Determining an Enemy's Most Probable Course of Action," *Military Review*, July, 1972, p.47.

as short as a week or as long as a month. The choice is left to the analyst responsible for computing the logit function.

Third, the analyst must record the number of times each indicator occurs within the time period selected for analysis. Suppose that two different command posts were observed displacing rearward during the time period. The number 2 should be recorded for this indicator (2 should not be recorded to represent two observations of the same command post displacing).

The intelligence analyst plays a crucial role at this point. He must correctly evaluate the accuracy of the battlefield information received. If the indicators are measured with error a sufficient number of times, the logit procedure will generate biased and inefficient weights. In the absence of field experience with the method, only information rated "possible true" or better should be used in calculating weights. Actual experience may indicate that a higher degree of accuracy is required.

As time passes, an array of information will be developed as shown in Table 1.

When sufficient data has been accumulated, the fourth step is the calculation of weights to be used to form the odds predicting equations. This requires the use of a computer although computer requirements are not excessive. Approximately 70,000 bits of memory capacity appear necessary. (Estimate obtained by examining the BIOMED FORTRAN program for nonlinear regression. This program uses a standard nonlinear optimization technique required for estimation procedures.) A computer with this memory capacity and acceptable computational accuracy can be purchased for approximately $17,000.

The computer's initial calculations need to be subjected to certain statistical tests found in standard econometrics textbooks. Results may suggest that certain indicators be discarded if not closely related to the choice of a particular course of action. The tests may also indicate a need to modify the estimation procedure. Specialized training is necessary for these tasks. At a minimum, a master's degree in statistics is required.

Because of specialized training requirements, weights may have to be estimated at theater or corps level but because the enemy performs similarly at all levels of command, weights calculated at theater or corps level can be used at lower command levels.

Fifth, we form equations to predict the odds of a given course of action. There is one equation for each course of action. This step can be left to the computer.

Sixth, the equations are used to predict the probability of various courses of action. This step is also computerized.

A computer is not necessary for steps five and six. If necessary, the analyst can perform these steps by hand although computation details are not relevant to the main point of the article which concerns what the logit method can do for the commander.

TABLE 2
APPLICATION OF THE LOGIT MODEL

(Hypothetical Weights and Probabilities)

Indicators of Enemy	Past Enemy Activity			Indicator Weights Resulting From Computer Analysis Of Past Enemy Activity	Current Activity	Probabilities as Estimated By The Computer Based On Current Activity
	1 Jun-6 Jun	7 Jun-13 Jun	14 Jun-20 Jun			
Frontage of enemy Forward Units in Sector	100 meters	100 meters	100 meters	.01	100 meters	Attack
Number of Enemy Arty Pieces Forward in Sector	50 pieces	48 pieces	40 pieces	.025	10	.20
Number of Enemy CPs Displacing Rearward	1 CP	0 CP	0CP	.30	0	
Number of Enemy Patrols	3	5	7	.20	4	
Indicators of Defend in Place						
Number of Field Fortifications	5	5	10	.15	5	Defend in Place
Number of anti-tank points	7	10	10	.30	8	.16
Number of Alternate Defensive Positions	11	15	20	.15	25	
Indicators of Delay						
Frontage of enemy Forward Units in Sector	100 meters	100 meters	100 meters	.04	100 meters	Delay
Number of enemy units in reserve	3	5	10	.30	3	.17
Number of Decisive Engagements in Sector	0	1	0	.15	0	
Indicators of Withdrawal						
Number of Enemy Arty Units Displacing Rearward	0	2	10	.40	25	Withdrawal
Number of Enemy Command Posts Displacing Rearward	0	0	2	.30	3	.47
Percent of Bridges Destroyed by Enemy in Sector	0	0	20	.20	5	
Actual Course of	A Attack	Defend	Withdraw			

Table 2 shows the use of logit analysis to estimate the probability of various enemy courses of action. Three points should be made regarding the example. First, the list of indicators is much shorter than it would be in actual practice in order to simplify the example. Second, the weights in the example could not be computed if three observation periods of past enemy activity were all the observation periods that were available. The minimum number of observations equals the number of weights to be estimated plus two. A partial list of the necessary observation periods is all that is used in the example in the interests of conserving space. Third, the weights found in Table 2 are hypothetical. Lack of a data base and research support for computer simulation preclude the calculation of actual weights.

Keeping these points in mind, let's look at Table 2 more closely. Column 1 is an abbreviated version of the list of indicators isolated by the intelligence analyst. Columns 2, 3 and 4 are a partial list of the occurrence of these indicators in the past as detected by intelligence collection agencies. Only information rated possibly true or better is recorded in these columns. Column 5 shows a list of weights based on a hypothetical computer analysis of the hypothetical information in Columns 2, 3 and 4. Column 6 represents hypothetical current enemy activity as detected by intelligence collection agencies. Again, only information rated "possibly true" or better is recorded in this column. Note the time period of observation in Column 6 corresponds to the time period of observation in Columns 2, 3 and 4. In each case observations have been recorded for one week. The length of time data is accummulated for forecasting must be identical to the length of time data was recorded when the indicator weights were calculated. Column 7 represents the probability of various enemy courses of action as estimated by the computer. These estimates are based on present patterns of enemy activity as recorded in Column 6 and the hypothetical weights in Column 5. These probability estimates are the most likely estimates given past enemy activity patterns and present observations of enemy activity.

In the example shown in Table 2, the probabilities of the various courses of action sum up to 100 percent. However, they may not always do so. Suppose, for example, intelligence collection agencies had not observed some enemy action. The probability of attack would be lower and the sum of all probabilities would be less than 100 percent. The difference between 100 percent and the sum of the forecasted probabilities indicates the degree of uncertainty associated with the forecast. This difference can be a positive or negative number.

Properly applied, this procedure can reduce the danger of surprise. When the enemy changes his intentions, his battlefield activities change. This generates a change in forecasted probabilities. If the analyst updates his forecast daily, a general trend in probabilities will emerge which will provide warning of a change in intentions.

As time passes, a pattern might appear, forcibly confronting the analyst with implications of the most recent information. The analyst does not have to accept these implications but he must develop rational reasons for rejecting them if he chooses to do so. He must remember that only information rated "possibly true" or better is used in the forecast. Additionally, the information is weighted objectively based on its importance in past battles. Since the information is considered accurate and given an objective weight, the analyst will find it difficult to discount information contradicting his preconceived ideas.

The analyst must consciously accept or reject the estimated probabilities. He should not blindly accept numbers provided him by the computer. The computer is an aid in analyzing information, not a panacea for the analyst's problems. If the analyst allows the computer to draw conclusions for him, he increases the probability of successful enemy deception operations. An enemy with knowledge of the computer's procedure can deliberately conduct operations designed to influence the intelligence estimate. If the analyst permits the computer to make decisions for him, he may end up allowing the enemy to draw his conclusions for him.

The danger of a successful deception operation increases when each enemy course of actions seems equally likely. In this situation, enemy manipulation of a small number of indicators could change the ranking of the probabilities. However, when one course of action is much more probable than the others, successful deception operations become difficult because too many indicators must be manipulated to change probabilities.

Potential enemy use of the knowledge of the odds predicting equations suggests the need for rigorous security requirements. Access to the indicators used by the logit system and the weights estimated by the system should be limited. In addition, care must be taken when transmitting information and conclusions. Knowledge of conclusions coupled with detailed knowledge for forecasting information may impact complete knowledge of how the forecasts are generated.

The forecasts resulting from the logit model should be transmitted up the chain of command. Higher commands can plot the forecasts of subordinate commands over wide frontages, perhaps uncovering the enemy's overall battle plan. The logit technique has certain similarities to the QUILT procedure described by Major Livingston. Both compute probabilities on the basis of weighted intelligence indicators. Both provide early warning of a change in enemy intentions by tracking changes in probabilities over time. Both make use of recording probabilities over wide frontages to reveal overall battle plans. However, the two approaches have important differences.

One important difference concerns the nature of the indicator weights. The weights used in the QUILT approach are

subjective weights attached by the analyst. Different analysts will use different weights. As a result, when higher commands plot probabilities across wide frontages, the probabilities will not be based on a common set of weights. Moreover, the QUILT procedure forces the sum of the probabilities of different courses of action to equal 100 percent (in keeping with the theoretical meaning of the term "probability").

The weights generated by logit analysis are objective weights provided by maximum likelihood estimation. These weights will be used at all levels of command. The analyst at any given command level may reject the probabilities predicted by the equations. However, he can report the probabilities predicted by the equations as well as his own conclusions to higher headquarters. By reporting both, higher levels of command will have a set of probabilities generated from a common set of weights.

A second difference between QUILT and logit lies in the area of support requirements. QUILT does not generate computer support requirements or requirements for personnel with specialized academic training. Logit requires both. Moreover, the requirements generated by logit are continuous requirements. As time passes, recomputation of the indicator weights may be desirable because of changes in enemy commanders or in enemy operating procedures. Whatever the reason, periodic recomputation creates an ongoing requirement for computer support and specially trained personnel.

QUILT and logit are complementary systems, not competitive ones. Logit does not draw conclusions for the analyst. The analyst may choose to alter one or more of the weights assigned by logit to battlefield indicators if he suspects a deception operation or because of the peculiar style of a particular enemy commander. The analyst's final conclusions may be based on a combination of subjective weights which he provides and objective weights provided by logit.

The logit weights might only serve as the analyst's starting point. A pure QUILT analysis requires the analyst to guess at the weights associated with individual indicators. Given past patterns of enemy behavior, logit informs the analyst of the most likely weights. Although the analyst may find it advantageous to alter some of the weights, he will not likely find it advantageous to alter all the weights. Despite individual peculiarities, enemy commanders are unlikely to depart too far from doctrine.

The logit procedure can be tested by computer simulation and field exercises. If the results of the tests are successful, the technique can be integrated into the intelligence estimation process. Such tests should be carried out at the earliest possible date. The procedure offers an opportunity to further improve the production of combat intelligence.

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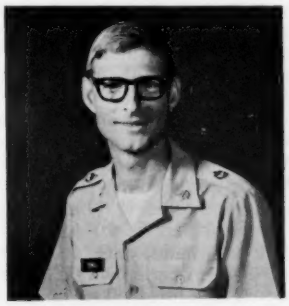


Assignments, Exceptions to Policy and YOU

by CPT Charles W. Thomas

Did you ever know an officer who wound up with the assignment or school you requested after you were told by "Branch" that current policy precluded your getting it? You were sure he didn't deserve the assignment any more than you did (and probably a lot less). Didn't take long to realize Branch wasn't talking straight to you, did it?

Real dissatisfaction, with Branch and with the Army, can result when an officer convinces himself that he wasn't dealt with squarely because fellow officers were given his "choice" assignments.

One factor too easily ignored in such situations concerned exceptions to policy that denied him the job. There are exceptions to policy that denied him the job. There are exceptions to every personnel policy in the Army. The personnel system was so designed to provide assignment managers the flexibility to include the "personal in personnel" while meeting Army requirements. But exceptions do cause misunderstandings. For one thing, your assignment officer doesn't have the time to list every exception possible for every assignment. If asked, however, he will be more than willing to discuss those that may have applied to a specific assignment, like yours.

Most exceptions are pure common sense and generally revolve around compassionate circumstances and meeting critical Army requirements. The trick is being qualified for the non-compassionate exception. Maybe you are wondering why LT Tentpeg has been identified for an in-country training program in Bangkok, while you, a junior Captain, have been told you will have to qualify in your MI specialty before you can be considered for FAO training—and you know Tentpeg is not specialty qualified. Well, you can be sure of about three things in this situation—one, young Tentpeg has done well in whatever job he has held in his short time in the Army (So what, you have too, eh?); two, the requirement to Thailand is an urgent fill (needs of the Army, but you are standing in the door, right?); and three (and here's the exception to policy) Tentpeg has a professional speaking ability in Thai and Lao and doesn't require any refresher training before going in-country.

The point is this: rather than get upset over why you didn't get the job another did, ask your assignment or professional development officer. He or she is used to handling these queries. Much of each duty day in MI Branch is spent on the phone with officers who didn't get exactly what they wanted.

You may assume that an officer who was quite happy with his first two or three assignments will let his assignment manager know if his next projected job isn't to his satisfaction. And there is nothing wrong with his asking. In fact, the officer should ask if he doesn't understand why he didn't get the job. The assignment manager would prefer addressing the question, and explaining the policy and exceptions that "drove" the assignment action to allowing a negative attitude to develop and, perhaps, pass on to others.

Exceptions to policy are sticky business. When you start applying them to Army requirements, some officers assume that their desires constitute sufficient justification for an exception to one policy or another. That's not how the system works. That old catch-all, "the needs of the Army" truly drives the train in developing regulations. These needs result in policies designed to implement the regulations and exceptions.

You are stationed at Fort Lewis. After 36 months there, you want an assignment directly to a current intelligence job at DIA. Branch says no because the assignment would involve a CONUS to CONUS move (called "operational move") and current DA policy tightly controls such moves. In fact, funding for operational moves is so limited that they are allocated on an exception basis. You buy that until your buddy Pete Foxhole shows you his request for orders (RFO) to DIA for the same time frame you were requesting. What gives?

Well, read his RFO carefully. Bet is wasn't for that 35B position you wanted. It was probably for a 53A35 (ADP), or another "hard skill," job that Branch simply couldn't find a qualified ADP officer to fill without using one of its precious operational moves. Since DIA is an "excepted unit"(*will* be filled to 100% of its authorizations In Accordance With DOD policy), Branch had to fill that 53 position - hence old Foxhole qualified for an exception to the operational move policy where you didn't. On the other hand, the current intelligence position you wanted was filled with a well qualified officer returning from overseas or, perhaps, from the Advanced Course since neither of those assignments constitute operational moves. Make sense?

It's a relatively simple, common sense process. Army personnel assignment and schooling policies are based on valid Army needs balanced with the personal needs of individual

officers and cost effectiveness. Normally, there are enough requirements relative to the number of available officers to satisfy most individual desires—but not always.

Take note of that phrase "available officers." Availability plays a critical role in developing your next assignment. Funding restrictions have resulted in regulations and policies that not only restrict operational moves but also preclude reassignment prior to completion of a normal tour of duty.

Can't you think of exceptions to this policy? From a common sense viewpoint, these are pretty much limited to compassionate reasons or simply that there is not an officer available in the correct time frame with the required qualifications. So, the assignment officer moves on to the next most available and qualified officer on his list and finds that the officer will have to be moved out of HQ, INSCOM 45 days early. Thus, another exception to policy.

In the final analysis, exceptions to assignment policies hinge on two general factors: one, documented reasons of extreme hardship or compassion, and two, the relative urgency involved in filling a valid Army requirement with the best qualified, most available (cost effective) officer.

This short article barely scratches the surface of exceptions to policy. As you well know policies and regulations are legion and the exceptions to each are numerous. Whether you should be considered for a particular position as an exception to policy is a question that only your assignment officer can answer, if you can't fathom it first.

Remember, a basic part of your assignment officer's job is to fill Army requirements. If he can fill those requirements with qualified, available officers, then he won't use someone who doesn't meet that criteria as an exception (*except* for compassionate reasons). But if you don't know why you didn't qualify, ask him. Don't get mad about missing that graduate school quota or terrific job at Fort Polk that would have meant reporting a little early. It is very likely, you didn't qualify for the exception and your assignment officer can tell you all about it.

CPT Charles W. Thomas
MI Branch

"GONNA GET CHARLIE TWO-ONE"

by LTC Jim Channon

The troops secured their tanks and APCs in the tank park at Hunter Liggett. It was the end of the first day of an army test evaluating the laser combat that let the tank crews fight each other realistically without danger to the crews. The men were tired and hungry, but their excited chatter continued all the way to the debriefing area. One phrase was common to all their comments: "We're gonna get that damn Charlie two-one."

It seems that one tank crew had created a tank tactic not covered in training programs and battle manuals. The NCO tank commander of "C-21" would move his track into defilade and then begin a strange sequence. First, he would climb out of the tank, slither on his belly up to the skyline to his front, locate a target and then shoot its azimuth on his compass. Then, he would come back down, quickly re-enter the tank, load the right kind of ammo, and set his gun on the compass azimuth he had taken. When everything was set, he would move the tank up to a point where the gun was exposed just barely enough to fire on the target. Then, "WHAM!"--and a quick roll back down into defilade. With this little tactic, 'ole C-21 was on target, with the right ammo, even before it exposed its turret to the enemy. C-21 scored repeatedly all day long without ever lingering in any enemy tank sights for more than 3 seconds.

Naturally, the other tank crews were vitally interested in how C-21 had done so well. It was embarrassing as hell to be killed and have that yellow smoke mark your tank, and those other tankers were determined to find out and learn the tactics C-21 used. "Discovery learning," the educators call it.

The next day, the other tankers had gotten pieces of C-21's tactic. By the third day, they had mastered it, and were now working on another challenge centered around making a dash through smoke. Again, new and effective techniques evolved from the same kind of discovery learning. Crews tried different things. Someone found a technique that worked like hell, and the technique spread to the other crews. It spread "naturally," i.e., they came looking for it.

We all know the fastest way to learn about fighting is to be in combat. Unfortunately, this kind of learning costs lives unnecessarily lost. So, the next best way to make that learning happen is through the same kind of intelligent OPFOR and engagement of simulators now used at Hunter Liggett and being readied for the National Training Center. Realism provides the motivation to try to fight right. Coupled with strong encouragement to use our famous "GI ingenuity," discovery learning can be the primary training mode at the National Training Center.

LTC Channon holds an MA in Human Communications and an MS in Military Art and Science. An MI officer, he has commanded rifle platoons in Europe, Kansas, and Vietnam. He is currently an advisor to the film industry in Los Angeles.

USAICS NOTES

Groundbreaking ceremonies for the Intelligence Center and School complex were held recently at the site near the intersection of Rucker and Hatfield Streets, Fort Huachuca. MG Gerd Grombacher, commanding general of the US Army Communications Command, and BG Albert Stubblebine, commanding general of the ICS, participated. The first phase of construction will include a solar energy plant for the complex and solar energy collection field; the basic officers' course building housing six 42-man classrooms, three 35-man classrooms, and two 63-man classrooms; the advanced officers' course building with three 78-man classrooms; and the students' support building with an auditorium, learning center, language laboratory, libaries and two 20-man classrooms.

Architect's rendering of the completed Intelligence Center and School

Architects are Friedman and Jobusch of Tucson; contractors are Santa Fe Engineers of Lancaster, Ca.; and Wayne Wheeler is the project officer for the US Army Corps of Engineers, Los Angeles District.

Story courtesy of the *Huachuca Scout.*

Congressman Morris K. Udall (D-Az), second from right, is greeted by Randy Lee, representative for the Santa Fe Construction Construction Company, builders of the solar plant and student complex for the U.S. Army Intelligence Center and School (ICS), on a visit to the post in April. Others welcoming the congressman were Wayne Wheeler of the Los Angeles District Corps of Engineers and LTC William Deasy, commander of the ICS 1st School Battalion.

(US Army Photo by Ken Pieper)

USAISD NOTES

Brigadier Generals Kenneth R. Symmes (left) and Albert N. Stubblebine, III, man the ceremonial silver shovels in groundbreaking festivities for the Intelligence Center and School's new $6.5 million academic complex at Rucker and Hatfield streets, Fort Huachuca. General Stubblebine, ICS commander, hosted the ceremony. In his remarks to the crowd, General Stubblebine paid special thanks to Arizona Senators Barry Goldwater and Dennis DeConcini and Representative Morris Udall for their major role in making the long-delayed complex a reality. Symmes, who retired April 30 from his position as deputy commanding general of the Army Communications Command here, was a guest at the April 9 ceremony. *(US Army Photo by Dick Korsak).*

Owl-Raising

On a blustery, cold February afternoon, a "Great Horned Owl" settled onto his perch over the entrance to School Brigade Headquarters, US Army Intelligence School, Fort Devens (USAISD).

This is no ordinary bird! It is the official symbol for the School Brigade. This particular owl was made with "tender, loving care" by three very talented members of the Training Aids Branch, Directorate of Training Developments, USAISD.

In a special ceremony, the artists, Bud Smith and PFC Lonnie Huntley of the Devices Section, and Ellen Farley of the Graphics Section, presented the owl to COL Philip J. Stevens, Commander, School Brigade, USAISD.

The idea for the owl came after the renaming of the US ASA Training Center & School to USAISD. COL Stevens felt the School Brigade, USAISD, needed a symbol. The owl was proposed by LTC William G. Hanne, Commander, 2nd Battalion, School Brigade.

The Great Horned Owl is the traditional symbol for wisdom and silence, making it the ideal mascot for USAISD and Military Intelligence.

And what a mascot it is, perched majestically above the entrance to School Brigade Headquarters. With its location on one of the main streets on Fort Devens, the owl can be seen by just about everyone working on or visiting the installation.

Like its real-life counterpart, the School Brigade Great Horned Owl is one-of-a-kind, and members of the Brigade are justifiably proud to have this masterpiece as their symbol!

Operational Testing of Electronic Warfare/ Intelligence Systems

by CPT Robert K. Spear

It's 0300 hours. Outside the operations center it's raining cats and dogs and you can't tell where the mud stops and darkness begins. To make matters worse, you've just received a tasking message which directs a supposedly simple action which you know cannot be carried out.

The division your Electronic Warfare Company supports is kicking off a counteroffensive in one hour. Your unit is to provide jamming in support of this operation. You've been ordered to degrade certain enemy communication nets and you're going to have to notify division head quarters that you can't comply. All three of the requisite jammers are deadlined for component failures and there are no spares in-country. Even if the jammers were working, they could never make it to their deployment sites in this mud. The vehicles on which they are mounted are too overloaded to travel except under ideal weather and road conditions. Besides, the operators can't see their controls in the dark and the rain in always getting into the control panels.

"Why didn't the Army give me decent equipment to accomplish my mission," you moan as you draft your "bad news" message to HQ. "These new jammers should never have been fielded! I don't understand why these problems weren't corrected a long time ago."

An unrealistic scenario? Perhaps, but perhaps not. In any case, it is to prevent situations like this that operational testing has been inaugurated.

What assurance do Electronic Warfare and Intelligence unit commanders have that they will get good, usable and supportable tools with which to ply their trade? It is the primary mission of the US Army Intelligence and Security Board (USAINSB), Fort Huachuca, Arizona to represent field users in the Army's quality assurance programs for new electronic warfare/intelligence systems.

How does USAINSB provide this assurance to the user? By conducting operational tests (OTs) to determine a prospective system's military utility, its operational effectiveness, its operational suitability and the need for equipment or doctrinal modifications.

Operational testing answers such questions as, "Is it Soldier Proof?; Will it work in PVT Snuffy's hands?; Does it require an electronics engineering degree to operate?; Will it do its job in a tactical environment under combat conditions?"

To answer these questions, OTs are conducted with typical user troops with the same skills as the troops who must use and maintain the equipment in the field. An operational environment is replicated as far as possible in conjunction with the use of realistic tactical scenarios.

OT gives us important information and is, therefore, essential to the US Army's procurement and fielding efforts. Given this importance, how does one go about designing, conducting and reporting an OT? First of all, the combat developer must give the test designer the test objectives to be answered. In this case the Director of Combat Developments at the US Army Intelligence Center and School (USAICS), Fort Huachuca, Arizona, is the combat developer. The following are typical operational objectives used throughout the TRADOC community:

1. Mission Performance.
2. Survivability/Vulnerability.
3. Reliability, Availability, Maintainability.
4. Deployability.
5. Personnel Selection.
6. Training.
7. Organization.
8. Doctrine.
9. Logistics Supportability.
10. Interoperability.

In addition to the relevant test objectives, the tester must be given a set of issues and criteria. These are used as standards of measurement to determine the system's performance in terms of pass/fail. The tester discusses these issues and criteria with the combat developer to aid him in determining the scope of the test. He ascertains what resources will be needed in terms of personnel, equipment, real estate, money and time. He then drafts an Outline Test Plan (OTP) detailing these requirements and staffs it through the organizations which will be required to provide these resources.

After staffing, the draft OTP is presented to the Army Test Schedule and Review Committee for approval. Once this is given, the OTP becomes a DA-approved tasking document.

Knowing what, when and where he will test, the tester is ready to begin his Test Design Plan (TDP). In order to do this he must be given additional information and resources. This comes in the form of Test Support Packages (TSP) consisting

of the following:

1. Maintenance Test Support Package.

a. Draft equipment publications.

b. Repair parts, accessories, tools, test equipment.

c. Maintenance facilities.

d. Personnel skill requirements.

2. Doctrinal and Organizational Test Support Package.

a. Means of employment.

b. Organization.

c. Logistical concepts.

d. Mission profiles.

e. Test Setting.

3. Threat Support Package.

a. Initial Operational Capability - Potential threat and capability.

b. Type threat anticipated.

c. Opposing forces (Battalion level or above).

d. Typical means of operating and known methods of defeating.

4. Training Test Support Package.

a. Course of instruction.

b. Training documents.

c. Lesson plans.

d. Personnel selection criteria.

e. Training aids or simulators.

The Test Support Packages are overseen by the TRADOC Systems Manager (TSM) and his staff. The TSM, a full colonel, is the TRADOC Chief Executive over a development program. He ensures that the test organization receives the needed test resources. He also monitors all aspects of the development program and represents TRADOC's interest at decision meetings.

Based on the above, a Test Design Plan is written and staffed through USAICS and TRADOC Headquarters. The Test Design Plan describes how each issue will be tested and how the resulting data will be reduced, analyzed and reported. It also describes how various test conditions will be treated; such as daylight vs night, rolling terrain vs mountainous terrain, or one tasking method as opposed to another.

Once the Test Design Plan is approved by TRADOC, a detailed test plan (DTP) is written. This sets down on paper the precise details of all aspects of the upcoming test. It serves as an SOP and ready reference and tells all test participants exactly what they are supposed to do, when, and how. If a data collector needs to know his assignment on the tenth day of the test, that information can be found in the DTP. The same goes for threat array operators, system operators, data reducers, and so on. Needless to say, this document usually ends up being very thick and requires a lot of careful planning and work.

Once the planning stages are finished and test resources arrive, the tempo really picks up for the Test Director and his staff. A short, pre-test trial or training phase is conducted. This is basically a dress rehearsal: it insures that all the participants know what is expected of them and that they get a chance to go through the paces of performing their test duties.

The big day finally arrives, T-day. From this point on, the Test Director can be likened to a tactical commander. He's responsible for scheduling test events, feeding the troops, insuring that accurate data is collected and properly reduced, deploying the system and the threat forces in an appropriate manner, insuring all support equipment is maintained, conducting troop inspections as well as the myriad of administrative functions normally required by a large group of military personnel.

A new EW/Intelligence system invariably brings on seemingly endless Generals and their supporting straphangers and the Test Director usually finds himself on the briefing stand (and directing system tours) at least three days out of the week during testing.

On the average, tests run from four to twelve weeks with little or no let up. There's always too much data to be collected in too little time. After short breaks to catch their breaths, the test directorate, data reducers and evaluators return to work while other participants go home. Once all data is reduced and evaluated, the test reporting phase begins.

The test report (TR) reiterates test issues and criteria, stating how the data was treated and the findings or the results of that treatment. It does not necessarily draw conclusions or give fix recommendations: that is the job of the Combat Developer's representative, the independent Evaluator. He observes the test and, based on its results and his own observations and interpretations, he writes the independent Evaluation Report. This is basically a user's viewpoint and normally becomes the TRADOC System Manager's position at the In-Process Review (IPR).

The IPR is a decision meeting to determine system viability, what "fixes" must be made on what time schedule, and, if the system is to be accepted into the Army inventory, how and when it is to be fielded. The IPR is composed of representatives from TRADOC (TRADOC Systems Manager), the Materiel Developer (that agency assigned the task of developing the equipment's design and contracting for its construction) and the Logistics proponent. If the IPR members cannot agree on a course of action, DA, Deputy Chief of Staff for Operations (DCSOPS) reconciles the matter.

From now on, all Electronic Warfare/Intelligence systems will be thoroughly tested before they reach the user. Hopefully this will preclude a nightmare scenario presented in the beginning of this article. Rest assured the EW/I systems of the future represent the Army's utmost efforts to insure that only the very best systems make it to the field.

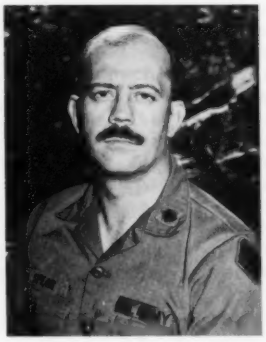
As an aside, for those of you who may be interested, an assignment with the Intelligence and Security Board at Fort Huachuca, Arizona could be one of the most satisfying military experiences of a career. This is especially true for those who may have been victims of poorly fielded systems in the past. This is one place where experienced company and field grade officers, as well as mid-level and senior NCOs, are given a chance to have their say in insuring that future EW/I systems meet the needs of the troops and commanders in the field.

QUICKLOOK II: Airborne Non-Communications Intercepter.

AN/PPS-15 Ground Surveillance Radar.

CPT Spear is currently a test officer on the US Army Intelligence and Security Board at Fort Huachuca. His extensive experience in operational testing of EW/I systems includes: Test Director of the OT III and OT IIIA, of the QUICKLOOK II Airborne ELINT system, Independent Evaluator of the QUICK-FIX-with-DF system, EW advisor to OTEA's EW vulnerability test of the AN/TPQ-36 CM/CB radar, and Operations Officer for the OTEA sponsored OT of the TACELLIS system. He was also the Test Director of the Concept Evaluations of the AN/PPS-15 Ground Surveillance Radar and of the EW Company Non-Communications Simulator.

CPT Spear holds a BS degree from Indiana University and an MS in Business Management from the University of Northern Colorado. A graduate from MIOAC, CPT Spear has been selected for the US Army Project Manager Development Program and holds MOSs in Cryptologic and Research and Development career fields. He is currently on reassignment orders to the 1st Infantry Division at Fort Riley, Kansas.



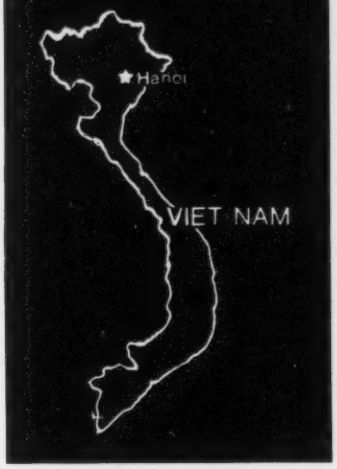
Notes from the Past

by
MAJ William L. Howard
edited by R. M. Kegresse

Conclusion

The New Year brought my replacement NCO. By now, I had assumed the task of providing a rotating display of captured material in the HQ and made many trips to collect items for display.

On one occasion, we rushed to Bong Son to evacuate a large quantity of the new RPG - 7 rockets captured by the 1st Air Cav. There were so many that we had to arrange to have them crated and flown out the next day. We spent the night in tents that were dusty, hot and impossible. By the time I was ready to sleep, an engineer unit began repairing the runway using a jackhammer to break up the macadam. After finally dropping off, I was awakened about 0200 as the VC began dropping mortar rounds on us. We scrambled for trenches and bunkers. I found myself inside a length of sewer pipe. After half an hour, the all-clear sounded and we went back inside the tents but were told to sleep with clothes and boots on. Half an hour later, more rounds started falling. As it was 0400, things were starting to stir, so we had breakfast and waited until our captured ammo was crated and ready for shipment. There were no flights to Saigon so we made arrangements to join a truck convoy to Quin Nhon. From there, we planned to find a flight to Saigon. The trip was fifty miles of jungle interspersed with a few villages. It was a nerve-racking trip, but then all trips in Vietnam seemed to be. After changing a



flat in the middle of this hostile country, we arrived at the Air Force Base about 1800. The Air Force wanted the ammo repacked and split by class and type, and flown to Saigon on different flights. We had no way to repack it, so headed for the beach in hope of finding a ship to put it on. We located the Director of Transportation and arranged to have it loaded on an LST bound for Saigon. We had to take the ammo to the dump for storage. The dump was, naturally, on the other side of the mountain. Once we had dropped it off, we returned to town, and let the truck and driver off for the rest of the day. We found beds for the night. I had to leave the NCO to escort the material to Saigon in order to assure its safe arrival. I headed for the airport and Nha Trang.

Work continued much the same as before, very little to do. My boss described the job as a composite of the whole war "Long hours of boredom, penetrated by moments of sheer terror."

We expanded our circle of contacts to include a Navy EOD four-man team whose main function was to swim with power generating ships and check for limpet mines which were magnetic devices stuck on ships to go off at a later time. We spent many hours with them and they helped us with many projects. They were real craftsmen when it came to disarming captured shells.

Our office was in downtown Nha Trang across from an open air market consisting of several stalls. In front was a dirt road with very poor drainage, four lanes wide, the outside two for parking. At this time, the road had shrunk to two lanes and was always filled with people. This was a prelude to the coming TET celebration. I felt that all was not as it should be. Part of the celebration included setting off strings of firecrackers. To hear them in the distance sounded like sporadic machinegun fire adn I remember thinking it offered cover for an attack. We were getting ready for our end of the month trip to Saigon and I was glad I was going to be out of Nha Trang for TET. Saigon had been declared a secure city and we would not be allowed to carry weapons while there. We all felt that the NVA/VC would try to do as much damage as possible in 1968 as it was a presidential election year. Most of us felt the TET season would mark the beginning of it. The big news at this time, however, did not concern Vietnam but rather North Korea where the USS Pueblo had been seized. I remember writing home that I hoped the incident was not a prelude to WW III.

The following day I flew to Saigon with some reports that were due. While in Saigon, I received a call from the NCO still at Nha Trang. He told me that

the VC had penetrated it the night before. Several people I knew had been killed early in the morning, and the city was overrun with infiltrators and armed MPs were needed as escorts. It had been thought that the NVA/VC planned to take the northern provinces then head for the peace table with a stronger hand. I thought that Nha Trang was about as far south as they would go.

While at Ton Son Nhut AFB that afternoon, the VC began dropping mortar shells. The base went on red alert and we remained there for the duration. The air police were running about, everyone was giving orders, and there wasn't much we could do. Some of us dragged out steaks and beer, and had a cookout. This was much better than eating at a BOQ. The alert ended about 2000 and we were allowed off base.

The next morning, the radio warned everyone to remain where they were. I was shocked by the lack of traffic in the streets — Saigon looked deserted. The radio stated that VC were all over the area, the Air Base was under attack, the American Embassy occupied, the JGS Compound overrun, and that several of the BOQs had been blown up. We made a quick assessment of our own situation and decided we had better do something. We were in the middle of downtown Saigon with very few weapons, little ammunition, and no food.

We prepared for a long night in Saigon, with everyone taking a turn at guard duty. In the morning, we donned helmets and flak jackets, and loaded into jeeps to become "Rat Patrols." We heard firecrackers in the distance. A fireworks store was on fire — each string of firecrackers sounded like another battle in progress. Back at the office, people began to trickle in looking for food and weapons. Since no one had been allowed to carry weapons in Saigon, virtually all headquarters personnel were unarmed and no one had made provisions for food in the BOQs as there seemed to be no reason for it. The NCO from Nha Trang managed to get a flight to Saigon and told us things were beginning to quiet down.

The following day we returned to Nha Trang. It was good to be back after the mess in Saigon. Life continued with the ever-present threat of new shootings and bombings. Before now, I had seldom carried a weapon but now carried a 45 pistol everywhere.

With little else to do, the people in the office decided to fill sandbags to put around it. Troops were transported to the beach for this purpose. I thought this was a mistake because we had looked unimportant. A sandbag palace would call attention to us and make us prime targets for attack. My NCO's and I each filled one sand bag and put them in front of the door step. That was our part.

By the middle of February, the TET offensive of 1968 was over, and I was picking up captured material and following up on new items captured.

The day after Palm Sunday, we had the biggest shock of the war when it was announced that the bombing of North Vietnam was to stop. This would give the North Vietnamese time to build up their supplies. Knowing it took four months to move supplies down the Ho Chi Minh trail, one of their gunners could, in that time, have the ammunition to shoot at me. I had six months left. It made me sick. Most of us felt we had been sold out although we kept our opinions to ourselves. We were here to do a job.

I woke up one Saturday in a state of jubilation—only 100 days to go. I could now get out my "short-timers calendar" and begin coloring in it.

About this time, it was difficult to travel about the country. Aircraft were scarce and I kept busy trying to find rides. I finally managed to find a helicopter going to recover some captured weapons, including some US weapons. I could not get a flight back to Nha Trang and talked the driver into taking me to Quin Nhon where I managed to put the weapons on a flight south.

The war would continue, and my tour eventually ended. It's all history. But this is 1979 and I try to think of where "the past" has taken us.

Today's Army has come a long way from that of the pre-World War II era in terms of both technical intelligence and military intelligence. I hope that, as time progresses, all officers will realize that MI "types" are not useless and that we no longer take "the most screwed-up LT and make him S2 so he can't get in the way."

We have a lot to learn, but learning is an on-going process, one which requires imagination and effort of the men and women of today's Army. We have taken great steps forward, but we must continue to move forward to tomorrow, learning from today and yesterday.

The Army Sergeants Association

SGM Donald Jenkins, Jr., of the White House Communications Agency has been elected President of the Army Sergeants' Association. Master Sergeant Chester Amis of Fort Ritchie, was elected Vice-President and SFC Ralph Burge, USA Retired, to board membership.

These officers constitute the charter board for the new association, membership which is open to Army, Reserve and National Guard enlisted personnel whether active, retired or honorably discharged.

TASA will represent its members at the seat of government and provide a wide range of membership benefits. A major objective of TASA is to enhance the prestige of enlisted personnel and thereby gain recognition among Americans of the vital role served by their enlisted corps in the nation's defense.

National offices of TASA are: Suite 203, 6110 Executive Blvd., Rockville, MD 20852.

The 504th Military Intelligence Group (CORPS) An Update

by COL Joseph C. Wilson

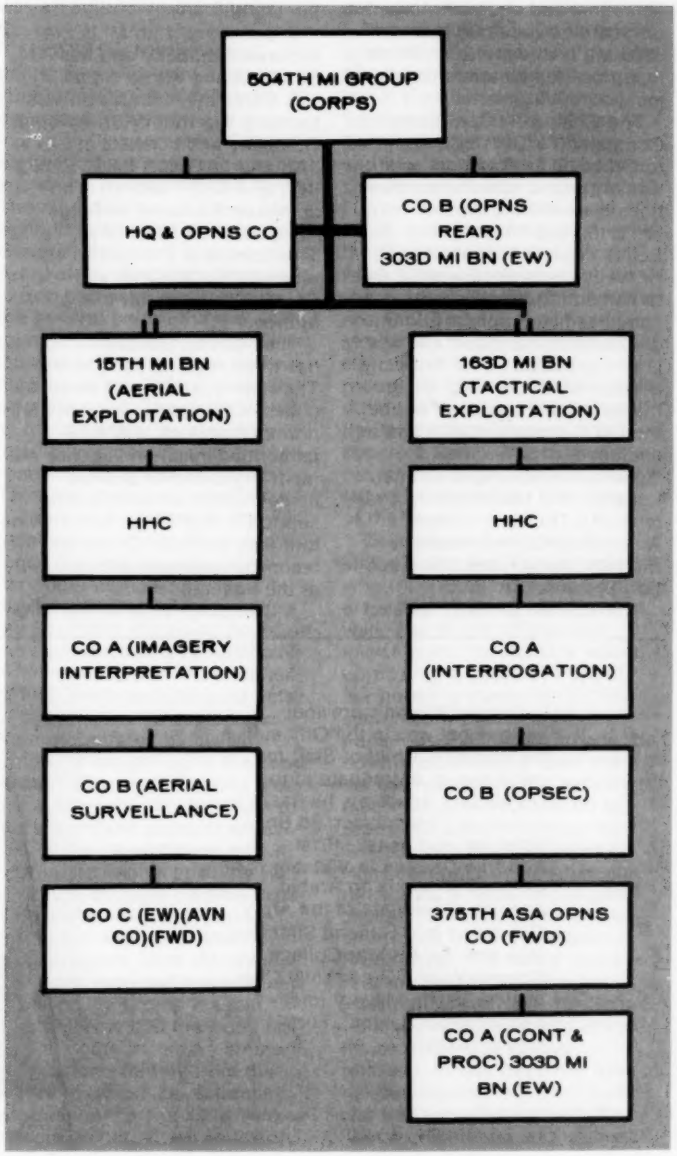
The 504th Military Intelligence Group (Corps) is the Army's Corps level test organization for the Combat Electronic Warfare Intelligence (CEWI) concept. The Group was organized on 21 April 1978 at Fort Hood, Texas, and is an integral part of III Corps. Its mission is to provide combat intelligence, electronic warfare (EW), and operations security (OPSEC) support to III Corps.

The 504th MI Gp, with attachments, has 1,975 personnel authorized and 1,481 assigned; 1,146 are at Fort Hood, 163 at Fort Bliss and 172 at Vint Hill Farms Station, Virginia.

The Group is organized with a Headquarters and Operations Company, a Control and Processing Company, an EW Operations Company (REAR), an ASA Operations Company (FORWARD), and two battalions - an aerial exploitation (AE) battalion and a tactical exploitation (TE) battalion. (See diagram)

The Headquarters and Operations Company (HOC) houses the Group Staff and the normal company administrative, logistic and communications support functions. The heart of the HOC lies in the Corps Intelligence Support Element which is referred to as the CISE. The CISE is a 103-person element under the operational control of the Corps G2, providing all-source production, collection management and dissemination, and OPSEC management. Also in the CISE, the Corps G3 has operational control of a five-person EW element. Nine personnel man a Battlefield Information Coordination Center (BICC) at the 6th Air Cavalry Brigade. As additional personnel become available, a BICC will also be provided to the 13th Corps Support Command (COSCOM). Both BICCs will operate under the operational control of the supported unit.

The HHD, 303d MI Bn (EW) was organized at zero strength, but the 504th does have two of the 303d (EW) companies currently assigned. A Company, 303d MI Bn is the Control and Processing Company. This company operates under Group control in the field and provides the Technical Control and Analysis Center (TCAC) for III Corps SIGINT/EW assets. This center provides the interface with echel-


504TH MI GROUP (CORPS)
HQ & OPNS CO
CO B (OPNS REAR) 303D MI BN (EW)
15TH MI BN (AERIAL EXPLOITATION)
163D MI BN (TACTICAL EXPLOITATION)
HHC
HHC
CO A (IMAGERY INTERPRETATION)
CO A (INTERROGATION)
CO B (AERIAL SURVEILLANCE)
CO B (OPSEC)
CO C (EW)(AVN CO)(FWD)
375TH ASA OPNS CO (FWD)
CO A (CONT & PROC) 303D MI BN (EW)

ons above Corps, all Group organic SIGINT/EW assets and with the divisions' TCAC. A Company, 303d MI Bn is attached to 163d MI Bn (TE) for administration.

B Company, 303d MI Bn, is located at Vint Hill Farms Station, Virginia and is the EW Company (REAR). This company is essentially a mini-field station with a capability of high frequency (HF) intercept and location. An electronic countermeasures (ECM) platoon was added to the company but personnel and equipment are not on board as yet. B Company, 303d MI, is directly subordinate to Group Headquarters due to its location in Virginia.

The 375th ASA Operations Company (FWD) is also assigned to Group. This Fort Hood unit was organized with three operations platoons with voice, HF/VHF, multichannel and ELINT intercept capability and HF/VHF jamming capability. Due to personnel shortages, the company has been reorganized into one collection platoon and one jamming platoon. The company is attached to the 163d MI Bn. In the future this company will be the EW Company (FWD) and be equipped with Automated Ground-Transportable Emitter Location and Identification Systems (AGTELIS) and Tactical Automated Communications Emitter Location and Identification Systems (TACELIS).

The 15th MI Bn (AE), located at Robert Gray Army Air Field, Fort Hood, is the Group's Aerial Exploitation Battalion. In addition to a Headquarters and Headquarters Company the battalion has an Imagery Interpretation Company, an OV-1D Mohawk Company, and a SIGINT Airborne Radio Direction Finding (ARDF) Company. A Company is the imagery interpretation (II) company. Its three II platoons work in support of the CISE, the Mohawk Company and the supporting tactical reconnaissance squadron from the USAF.

B Company, 15th MI is the Mohawk Company and has SLAR, IR and Photo capability.

C Company, 15th MI Bn was formerly the 156th ASA Aviation Company and consists of LEFTJAB and LAFFING EAGLE, SIGINT, and ARDF aircraft. The company is located at Biggs Army Air Field, Fort Bliss, Texas. This company is slated to receive QUICKLOOK and GUARDRAIL aircraft in the future.

The 163d MI Battalion (TE) has three organic companies. The Headquarters and Headquarters Company, in addition to normal functions, has a 16-person technical intelligence element organized to provide limited technical intelligence support to the Corps and provide interface between Corps and the technical intelligence community at the national level.

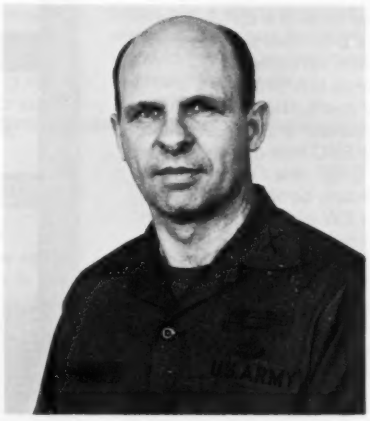
A Company, 163d MI Battalion is an Interrogation Company. At full strength it would be capable of providing interrogation support for subordinate divisions and brigades and other Corps elements. In garrison, in addition to its daily training, A Company operates the Fort Hood Language Training Facility.

B Company, 163d provides operations security (OPSEC) support to the Corps. The company combines counterintelligence and signal security assets to provide a single source of security expertise for III Corps. The company emphasizes the identification of real world essential elements of friendly information (EEI) during exercies and the selection and enforcement of appropriate countermeasures.

Current efforts in the 504th are to refine organizational and operational concepts to improve all-source intelligence support to III Corps. This is not an easy task in that the Group has some notable personnel and equipment shortages in the following functional areas: SIGINT, EW, CI, SIGSEC, and maintenance.

In spite of these shortfalls, the restructuring of intelligence assets into the present 504th MI Group is providing III Corps with improved all-source intelligence support, and the Group is laying the foundation for MI Groups of the future to be organized under the CEWI concept.

Colonel Wilson's previous assignment was in the Office of the Assistant Chief of Staff for Intelligence. A graduate of the US Military Academy, he has served as Commander, 2d Bn, 501st Inf, and as G2, 101st Airborne Division in Vietnam. Colonel Wilson is an Arabic linguist, a graduate of the Army Command and General Staff College and the Air War College. Colonel Wilson is currently Commander, 504th Military Intelligence Group (Corps), Fort Hood, Texas.



Confederate Espionage

by
CPT Ernest A. Miller

The role of the spy in the American Civil War is one of the most neglected facets of that turbulent conflict. The historian who would address this subject must uncover tracks carefully camouflaged by the agents themselves, the governments of both the United States and the Confederacy, and time itself.

Judah Benjamin, Secretary of State for the Confederacy burned all espionage records as the Federals entered Richmond. The US considered its records so sensitive that they were sealed in the National Archives until 1953.[1] This has resulted in a most incomplete understanding of the tremendous impact of espionage agents, particularly those of the South, on the military and political actions of the Civil War.

In the South, necessity was truly the mother of invention. Unable to meet the Federal Forces as equals on the battlefield, the South poured ever-increasing resources into unconventional projects that resulted in the introduction of the torpedo and the submarine.[2]

The intelligence arena saw the introduction of primitive microdot technology, imitative deception on the telegraph and, on both sides, aerial surveillance from balloons.

The general superiority of Confederate field commanders, cited as a major reason for the surprisingly long survival of the Confederate cause, was largely due to their access to and use of superior military intelligence. Simultaneously, the Confederacy directed enormous efforts to the exploitation of Northern ambivalence concerning the war to bring about a favorable political settlement.

Neither side entered the war with a formal intelligence organization and such organizations as did develop were generally ineffective. Generals normally operated their own spy rings—often recruiting and directing agents personally. Strategic intelligence was a game played by both Presidents and their respective secretaries of State and War. Jefferson Davis, in particular, devoted an enormous amount of time to playing spymaster. Still, only on November 30, 1864, with the war virtually over, did the Confederacy establish a Secret Service Bureau which, even then, was an adjunct to the Signal Corps.

Most of the North's intelligence agencies were actually counterintelligence networks organized in response to the increasingly successful Confederate efforts at espionage, sabotage and subversion in the North. The most famous of these, Pinkerton's, was hired directly by General McClellan to support his Army of the Potomac. Allan Pinkerton had been employed by the general before the war as a railroad detective while McClellan was president of the eastern division of the Ohio and Mississippi Railroad. The detective was as big a disaster as a military intelligence operative as the railroad president was as general. They lost their jobs together.

The circumstances of the war greatly favored Southern agents. Since the vast majority of military operations occurred in border and Confederate states, the Southern spy could count on the assistance of a sympathetic civilian population. As a matter of fact, many spontaneous acts of subversion and espionage were perpetrated by civilians who were caught up in the sense of patriotism and romantic glory of the moment only to return to more mundane pursuits when the armies passed them by.

Until the final year of the war, when the struggle became especially bitter, very few captured spies were executed. Most women agents were sternly lectured and escorted home if they promised "not to do it again." One suspects that the Southern belle's reputation as a "femme fatale" stems largely from the ease with which she extracted information from gullible Yankee officers. Security was so lax on both sides that the only real danger was in getting information back and forth across military lines. Elaborate Confederate courier networks could move information from Lincoln's cabinet room to Richmond within a day, but the ordinary line crosser faced enormous difficulties passing through unfriendly lines.

The most famous Confederate spies fell into three main groups: the aforementioned civilians living in the main battle areas; Southern sympathizers living in the North after the war began; and members of the flamboyant cavalry commands of Morgan, Forrest and Early. Miss Belle Boyd, a 17-year-old girl living in the Shenandoah Valley, Mrs. Rose O'Neal Greenhow, a middle-aged Washington hostess and CPT Thomas H. Hines of Morgan's Cavalry were the most effective of their respective groups. In their day, they earned outraged headlines throughout the North. In retrospect, it is apparent that just as their successes prolonged the war, their failures doomed the last hopes of the South.

Belle began her career by killing a drunken Yankee soldier who tried to tear down a Confederate flag from her bedroom wall. The Union officer who investigated the incident wound up posting a guard in front of her house to spare her further such inconveniences! Her numerous friendships among the boys in blue were a town scandal but resulted in the delivery of much valuable information to Stonewall Jackson during his Shenandoah Valley campaigns. Her finest hour came when she ran across a battlefield to give Jackson the disposition of Federal troops in her hometown of Front Royal. The result was a rout for the Union, terror in Washington and fame for Belle.

Falling repeatedly into Union hands, Belle was always released. Illness freed her from her second imprisonment and she was escorted through the lines to Richmond and an honor

guard reception. Her jailor sent a wedding trousseau bought with his own funds and though her jailhouse romance with a captured Confederate officer faded, she kept the trousseau. Carrying dispatches to England, she was captured running the blockade. Ever **La Belle,** she married her captor and converted the young Union naval officer to the Confederate cause. Her spying days were over however, and Belle spent the remainder of the war in England lionized as the most romantic spy of that most romantic war.

The exploits of Rose Greenhow were somewhat less colorful, but more effective than those of Belle Boyd. Rosie's career was brief (she and Belle were both amateurs), but she nearly won the war for the South before it really got started.

Rose was a lioness of Washington society. Widely believed to have been President Buchanan's mistress, the widow Greenhow cultivated lesser men from Secretary of State Seward to mere army captains possessing maps of Washington's fortifications. Despite her well-known Southern sympathies, her illustrious dinner guests spoke freely in her presence of war plans and preparations.[4]

Rose prepared for her self-appointed task early—by the time Fort Sumter fell she had organized a spy ring which reached the inner circles of the War Department. In the uncertain days before Bull Run, a steady flow of high level intelligence was delivered by Mrs. Greenhow (on one occasion, she let down her long black hair before an astonished Confederate general and plucked out the message) and her accomplices to Richmond.

The most important of her intelligence, concerning the ease with which unguarded Washington itself might be seized, was never exploited by leery Confederates. But when Rose informed Beauregard of the day, routes of march and strength with which McDowell would finally open the initial campaign of the year, the forewarned Confederates put the information to good use. The consequent rout at the first Battle of Bull Run nearly wrecked the already fragile support for "Mr. Lincoln's War."

Rose was arrested not long afterward. She had attracted too much attention to herself with her overtly pro-Southern sympathies. The story of her undoing is a comedy of errors too long to recount here, but it was Allan Pinkerton's first and greatest counterintelligence success. Because of her powerful friends, Mrs. Greenhow endured a brief and rather luxurious imprisonment. Security remained so lax that Rose supplied the South with more valuable information while imprisoned. Her exasperated captors finally rid themselves of their politically protected enemy by delivering her through the lines to a heroine's welcome in Richmond. But, like Belle, Rose remained a thorn in the side of the Union. She, too, went to England where she wrote a book about her exploits. The book was a very effective piece of pro-Southern propaganda in Europe and its plentiful royalties were devoted to Confederate causes. Rose died while escaping a grounded blockade runner in heavy seas in 1864. She was drowned when her small boat capsized and she was weighted down by the gold she was smuggling into the South. Her body washed ashore to be buried with honors. Even in death Rose Greenhow served as a romantic symbol of dedication to the cause.

Unlike Rose and Belle, CPT Thomas H. Hines of Morgan's Raiders was no amateur. A capable combat commander and a resolute secret agent, Hines was arguably "the most dangerous man in the Confederacy."[5] He never wrote a book. More than twenty years after the end of the war, Jefferson Davis ordered him to remain silent.[6] The magnitude of his operations was only partially revealed in 1953 when the Federal government allowed historians to examine the records extant in the National Archives.

Any member of the Confederate cavalry command was half spy almost by definition. They operated largely in enemy territory on missions that we would today term special operations. Their uniforms could most charitably have been described as irregular. For most of the war, Hines rode with Morgan as a valued troop commander or ahead of him to mobilize sympathizers and perform advance reconnaissance.

He was operating in a reconnaissance role when Morgan made his famous Indiana raid in 1863, the real purpose of which was to encourage a massive uprising by anti-war Northerners known commonly as Copperheads. Their numbers and influence can hardly be overestimated and they created enormous political problems for Lincoln. The South saw in them, particularly after Gettysburg, its only real hope for a favorable end to the war and devoted vast resources to fomenting an insurrection in the North that would topple Lincoln's administration either politically or by force of arms. There is considerable evidence, for example, that the New York draft riots in 1863 were instigated by Confederate agents.[7]

Hines failed in Indiana. The Copperheads proved to be (and not for the last time) more sound than fury. Morgan's raid fizzled when the uprising failed to materialize and both he and Hines were imprisoned along with most of the command. The raid had caused much consternation throughout the North, however, and the pair were celebrated prisoners in Columbus, Ohio penitentiary. Only a few months later Hines electrified the country by engineering his (and Morgan's) escape. Shortly after his return to the South, Hines was commissioned by President Davis to undertake the most secret and most incredible mission of the war—the Northwest Conspiracy.[8]

The Northwest Conspiracy was aimed at sparsely populated Indiana, Illinois, Ohio, and Michigan and those states bordering Canada; New York was also targeted. The conspiracy, a campaign of terrorism, involved a number of loosely coordinated schemes aimed at bringing the war home to the North and preventing Lincoln's reelection in 1864.

Hines operated from Canada and was technically subordinate to three high-level Confederate commissioners sent by Davis to oversee the operation. But the

Northwest Conspiracy was the twenty-four year old Hines' project. Canada was well-suited as a base of operations. Several large prisoner of war camps were situated near the border and numerous escaped Confederate soldiers had taken refuge there. The British authorities were not disposed to interfere with Confederate activities and isolated towns near the border were unprotected.

The major objective of the conspiracy, the revolt of the Copperheads, did not occur. Their national leader, former Congressman and would-be President Clement Vallandingham, promised Davis that a million armed men would rise at his command, but despite prodigious efforts by Hines, their temperament proved to be more defensive than offensive. They constantly defied the authorities, but had neither the leadership nor the inclination to attack them.

Because of the caliber of men conspirators must deal with, Hines found himself betrayed many times. What is amazing is that his attempts at sedition were so nearly successful.

On the political front, the Copperheads were much more active. They controlled numerous local politicians and, in fact, Hines funnelled a large amount of Confederate money into the campaign of the Copperhead gubernatorial candidate in Illinois. Their greatest achievement was forcing (through influence at the nominating convention) the War-Democrat McClellan to run on a "peace at any cost" platform.[9] The election day terror campaign never materialized because a thoroughly alarmed Lincoln imposed all but martial law to ensure peace and reelection.

Many other activities falling under the general heading of the Northwest Conspiracy were of lesser importance. These were more or less successful than the abortive Copperhead revolt. Raids on Vermont and Maine were conducted by Hines' men in Canada. The famous St. Allan's bank robberies netted a few greenbacks, but, more importantly, made the Union feel vulnerable. A plan to seize Chicago collapsed, compromised by the sheer weight of planning and the numbers of persons who knew about it. A partial success was the proposed burning of New York City. On the night of November 25, 1864, several of Hines' men, abetted by sympathizers in the city, set fire to some fifteen hotels and several ships in the harbor. Damage was tremendous and panic widespread, but the envisioned general conflagration was averted.[10]

Hines' record was one of failure, near misses, and partial success; hardly what one expects to hear about a top secret agent. Yet he and his small band (never more than twenty-five intimates) were a psychological success. Hines became the most hated and feared man in America. Because of his efforts, thousands of soldiers were required to keep order in the North; soldiers the hardpressed Confederate armies would not have to fight.

The South took understandable, if perverse, pleasure in the terror Hines spread. Hines found it politic to remain in Canada for almost a year after the war to allow passions to cool before returning to his native Kentucky to become a lawyer and, later, a respected judge. Ironically, his narrowest escape came after the war. Because of his striking resemblance to John Wilkes Booth, he was nearly lynched by a mob while making his way back to sanctuary in Canada.[11]

Hines, Belle Boyd, Rose Greenhow and hundreds like them are a part of American history known by few. They contributed immeasurable to the Confederate war effort and to the history of American military intelligence. A tabulation of "what-ifs" and "might-have-beens" involving Confederate espionage agents drives home dramatically the thin line between victory and defeat in military conflicts and the importance of the clandestine warrior to the military commander. The lessons these nearly successful agents taught the Union War Department were largely responsible for the development of the intelligence and counterintelligence sections in the United States Army of today.

FOOTNOTES

1. James D. Horan, **Confederate Agent: A Discovery in History** (New York: The Fairfax Press, 1954), p. XVI.
2. Philip Van Doran Stein, **Secret Missions of the Civil War** (Westport: Greenwood Press, Publishers, 1975, p. 14.
3. **Ibid.**, p. 18.
4. Harnett T. Kane, **Spies for the Blue and Gray** (Garden City and New York; Doubleday and Company, Inc., 1954), p. 131.
5. John Bakeless, **Spies of the Confederacy** (Philadelphia and New York; J. P. Lippincott Company, 1970), pp. 6 - 13.
6. Horan, **op. cit.**, p. 3.
7. **Ibid,** pp. 286 - 287.
8. Stein, **op. cit.**, p. 148.
9. Horan, **op. cit.**, pp. 71 - 76.
10. **Ibid.**, pp. 132 - 133.
11. **Ibid.**,pp. 208 - 223.
12. **Ibid.**, p. 261.

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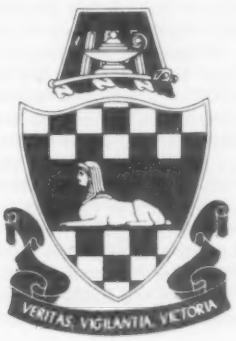
A recent graduate of the MI Officer Advance Course and a 1972 graduate of West Point, CPT Miller was most recently assigned to the 55th Aviation Company in Korea. He is now assigned to the 24th Infantry Division, Fort Stewart, Georgia.



Soldier or Linguist?

by
LTC Don E. Gordon

Are military linguists also soldiers? The answer to this unusual question should be an unqualified, "Yes, of course," but some sectors of the defense community advocate the removal of most military linguists from tactical units. There is currently an apologia afoot which suggests that military linguists in MOS 98G are trained at great expense to accomplish tasks which should take priority over the time-consuming development of basic soldier skills and the maintenance and continued readiness of combat equipment. With the decreasing number of Mental Category II and III-A soldiers from which military linguists are selected in the Volunteer Army, increased competition for a scarce manpower resource is understood.

Opponents of the concept of assigning military linguists to tactical units contend that they do not receive productive utilization of their language skills in tactical units during peacetime. The antagonists make a strong case for the elimination of military linguists from tactical units during peacetime. To argue this case one must understand the chief training premise of the United States Army: the Army trains in peacetime in the manner in which it will have to fight in war.

There is no status within the armed forces, certainly not within the United States Army, recognizing linguist first, soldier second. If the military linguist is indeed intended to be a soldier, then he belongs in the Army; he belongs **100 percent** in the Army and not on a dais. The linguist requires tasks, conditions and standards fitting Army intelligence objectives. If performance objectives do not fit the Army, then assign those tasks to a more suitable agency.

After serving eighteen months as a Combat Electronic Welfare and Intelligence Battalion commander with the 82nd Airborne Division, I have no doubt that the peacetime utilization of military linguists is one of the largest training problems in tactical intelligence units today. Still, it is considerably better than it was before implementation of the Army's Intelligence Organization and Stationing Study which integrated Army Security Agency and other military intelligence

units into CEWI battalions.

To fully appreciate the problem involving the utilization of the military linguist from the perspective of both the individual linguist and the commander, it is necessary to bring the origin of the problem into focus.

The linguist's perception of his recruiting and training cycle has been voiced enough to confirm its substance. Eighteen-year-olds attracted to military intelligence duties in general and to linguist skills in particular are not your average soldiers. They are also not savvy about life in the Army prior to their enlistment. Individuals with high classification battery and general technical aptitude area scores enlist in the Army, as a general rule, for reasons which suggest their naivete and vulnerability. Most are undecided about college or unable to find a relevant civilian job. When these individuals approach or are approached by a recruiter, they are vulnerable.

The recruiter is a salesman and, usually, a very good one. He tells the individual exactly what he wants to hear. The recruiter advises that as a military linguist the individual will have an opportunity for education, a chance to be an individual, to taste adventure, to mature, and to travel. The pitch continues with mention of a meaningful job, a decent wage and pay-related benefits. There are opportunities to learn and use a second language. Everything the recruiter said is true; everything the recruiter said is also false in that the same pitch can apply to any MOS in the Army. Contributing to the problem is that most eighteen-year-old recruits listen selectively and do not know how to ask the right questions.

Because of the individual's relatively high GT and individual battery scores, the recruiter can provide the potential military linguist with expectations of an "out-of-the-ordinary" military job. The individual is advised that he or she is over-qualified for skill requirements for infantry, supply, or maintenance fields and qualified for a special skill in military intelligence which the recruiter really isn't allowed to talk about because of its "classification." The typical recruiter, by his vagueness, unfamiliarity and lack of experience with both language training and military intelligence, but not because of classification, helps develop aspirations and expectations which cannot be met in tactical units. Unfortunately, the recruiter stresses accomplishments of the special skills and individual goals at the expense of explaining the Army's insistence that all soldiers must spend a large amount of time learning basic soldier skills and operator maintenance of equipment. Believe me, there is nothing classified about the motor pool.

Actually the only distinction that separates a military linguist from an infantryman in most divisions is about six hours of different training each week and maybe one sixty-day peacetime utilization trip to a field station

or other site each year.

An older recruiting poster depicting a bright young man wearing civilian clothes and carrying an arm load of college textbooks under the lettered question: **Want A Job With Adventure—Ask Your Recruiter About Military Intelligence** falls into the category of cigarette advertising.

At this point it should be stressed that military linguists are not the only soldiers who, if given the choice again, may not enlist in the Army. The difference between the linguist and other soldiers is that many linguists are firmly convinced that they were promised something the Army never intended to provide—a job as a full-time linguist.

After recruitment, the linguist attends individually challenging basic training. It is only nine weeks long and the prelude to attendance at the Defense Language Institute Foreign Language Center (DLIFLC) at Monterey, California.

DLIFLC has a well-earned, outstanding reputation for producing qualified linguists, but they do not produce military linguists. Courses of instruction range from 24 to 47 weeks depending on the language. The instruction is both intensive and demanding. Afterward, the linguist fully expects to have an opportunity to apply the language skills which he has worked so long and hard to acquire. It should be understood that DLIFLC emphasized listening and reading skills, much of them to meet skill requirements of the 98G in the Intelligence and Security Command—not to speak or read—only listen and copy. DLIFLC responded with emphasis on aural comprehension. It didn't work. The lack of emphasis on speaking skills is a critical shortcoming that plays a vital role in peacetime utilization.

After graduating from DLIFLC, Army linguists are sent to Goodfellow Air Force Base in Texas to learn the military application of their second language. This instruction consumes an additional period of four to 18 weeks, again depending on the language. The Air Force also has a well-earned reputation by NSA standards for operating an excellent technical program.

The Air Force, as executive agent, administers the courses through the USAF School of Applied Cryptologic Sciences. The control documents are Air Force forms, but Army students receive Army subjects from Army instructors.

Unfortunately, the curriculum is geared to the "strategic" field station operation, in spite of the fact that 75 percent of the 98G population are assigned to tactical units. You can count on the fact that, no matter how professional, most of the instructors have spent little of their own career in tactical units.

Goodfellow Air Force Base is, by Army standards, a relaxed atmosphere befitting an academic environment; it is far from the atmosphere of a tactical unit. Up to this point, the military linguist has not been exposed to the "real Army" for eight to fifteen months while soldiers in most other MOS have acquired field skills by this time.

It is at Goodfellow that the linguist first grasps the magnitude of what is about to happen to him. He learns that there is a difference between a military linguist assigned to a tactical unit and a military linguist assigned to a strategic unit. It may be concluded that the pervasive attitude among the Army cadre at Goodfellow is that assignment to a tactical unit is demeaning, or "the pits." By contrast, the cadre strongly endorse the background from which most of them were selected—strategic assignment. Unfortunately for the linguist, he was arbitrarily assigned to either a tactical or strategic unit based upon the Army's need of his language skill. Most linguists have lost motivation for a tactical assignment at this point.

Ironically, the linguist assigned to a strategic unit will use his language and avoid most of the soldier skill training but he will not reenlist in large numbers. First-term linguists assigned to tactical units now have a higher reenlistment rate than those assigned to strategic units although the rate remains the lowest of any MOS in most divisions.

After eight to 15 months of an intensive academic environment, the military linguist assigned to his first tactical unit arrives, baggage in hand, at the division replacement detachment. From this point forward, the military linguist can depend on spending more time in the motor pool and in the field than in the language laboratory. This requires a big adjustment. Many in the Army say this is not right. Maintenance is not a critical skill identified for linguist MOS and consequently a lot of time should not be spent on maintenance.

In the July-September 1978 issue of ***MI Magazine*** CPT Proctor, writing about training problems involving military linguists, explained that tactical unit commanders may lack an understanding of the tactical requirements of linguist personnel. Commanders certainly DO lack an understanding of how to provide linguists with the precious time necessary to maintain language skills upon which success in battle will depend. But commanders have other considerations.

After eight to 15 months spent in language training, most newly assigned linguists without supplementary experience from living abroad or in a bilingual family are unqualified to use their second language or to develop it. Why not, you ask? Because they cannot lead physical training drills, explain assembly and disassembly of their weapon, conduct drill and ceremonies, or teach basic level military instruction at the squad or team level in their second language. They remain unfamiliar with military vocabulary despite high marks in grammar. We need soldiers who can understand enemy infantrymen and tankers. We need linguists who can talk like soldiers the world over, soldiers who can speak and understand street language or adaptations of a language which are not grammar-dependent.

Soldiers assigned to our unit who speak English as a second language, including many who never spoke English before age 18, can do all those things mentioned above in both their native tongue and in English. Their environment, of course, is different; the soldier speaking English as a second language is totally immersed in an English speaking Army and culture.

The 313th CEWI Battalion experimented very briefly with a technique borrowed from Special Forces language instruction referred to as total immersion language training. During the total immersion program, all linguists participate in normal military training and maintenance, working together in their same teams and platoons, but are permitted to speak only Spanish during duty hours and preferably after duty hours. Altogether, one-fourth of the 313th CEWI Battalion (120 personnel) have an ability to speak Spanish. About 70 of these are non-native speaking linguists in one of several linguist MOS. Physical training, unit formations, bulletin boards, the mess hall, every aspect of military life should be conducted in Spanish. Tools are requested from the tool room, supplies from the supply room, all in Spanish. If your dessert is put under your potatoes and gravy, well, you learn a little faster.

Total immersion got off to a good start because the battalion had the advantage of an NCO who spoke native Spanish and who had served in a Spanish-speaking Army prior to enlisting in the US Army. Most of the linguists liked the program, liked the concept, and wanted more of it. The program failed before it had a chance to grow because we had not fully prepared to control the environment. We lacked instructors, resource material and funds. Additionally, most of the linguists needed much more instruction to gain that level of fluency that we had anticipated.

The 82d Airborne Division is fortunate to have a large number of native speaking Hispanic soldiers, many of whom are assigned to our battalion. For the most part, however, our linguists who attended Monterey and Goodfellow cannot readily converse with the native speaking soldiers when they use their normal idioms, colloquialisms and tempo. In effect, when native speaking soldiers speak as soldiers with little emphasis on structure or grammar and using a large incidence of profane adjectives and verbs, the schooled linguist is frequently left behind.

The crux of the problem appears to be that emphasis in training most tactical unit military linguists focuses on listening, rather than on using the language like a soldier. The ability to speak a foreign language is the key to developing rational use and logical prediction in the language. This consideration is especially important when linguists are deprived immersion into the culture of the second language. The military linguist becomes a prisoner of language tapes and outdated periodicals.

If Spanish linguists cannot maintain Spanish language skills in the 82d Airborne Division, then the problem transcends command emphasis. The Army simply cannot send linguists to school for less than a year then dump them on tactical units and expect language skills to be improved.

Let us assume that twenty hours a week were available for language training in tactical units. Can anyone really perceive bright, young, soldiers finding satisfaction and relevance in listening to language tapes twenty hours a week? After two or three months, even the motor pool will look good.

If the peacetime utilization of linguists in tactical units is to be accomplished, then a first step in reaching a solution is to insure that linguists can speak the second language. Peacetime utilization should also be conducted daily and integrated with regular training and maintenance.

By contrast, the arbitrary requirement for linguists to attend a specific number of hours of language drill per week is a sham. It doesn't work in our Army and it doesn't work in the Soviet army.

Language training must also be fun if it is to succeed; it can't be a giant pain in the butt for both linguist and commander. Under the best of circumstances, language training today is unimaginative and boring.

Many linguists have been convinced that linguists don't really have to be soldiers, only linguists. This tale passes from linguist to linguist as though it were etched in stone at Arlington Hall Station and Fort Meade. When assigned to a tactical unit, there are two certainties in life besides death and taxes. First, maintenance priorities will not go away. CEWI battalion personnel will always spend about half of their work week performing maintenance. Maintenance **is** training. Only when poorly supervised does anyone paint and repaint trucks. Half of the maintenance will be spent on tactical vehicles, weapons and NBC equipment. The other half will be spent on the antiquated hulks that the Army inherited as EW and SIGINT equipment. Secondly, divisions do not provide military intelligence units with valets to perform their maintenance or to protect them in combat. That old saw which reported that Army Security Agency units had to receive infantry protection on the battlefield may be often repeated at the annual picnic at Arlington Hall but you will never find it in a division operations order. The fact is that military intelligence units are often required to fight side by side with the infantry. Military linguists are soldiers first, believe it.

Military linguists are certainly soldiers in the 82d Airborne Division and among the best soldiers in that division. They accompany the Initial Ready Company, the Division Ready Force battalion, and all other infantry battalions. They parachute with the infantry and carry their equipment in some of the heaviest rucksacks in the battalion when accompanying the infantry in the arctic, the jungle, the desert and elsewhere. They are consistently cited by the infantry for their excellence in tactical skills. When called upon to assist strategic units in the accomplishment of actual intelligence missions they have always returned with commendations.

The Army Language Readiness Training Program explained in AR350-3, has offered one of the first rays of sunshine for tactical military intelligence units in at least twenty years. The program provides funds to send individuals, teams, platoons, even companies to strategic units to practice their language skills for sixty days. That aspect is not new, but doing this while making every effort to maintain small unit integrity is. The sixty day period was selected as a compromise between the amount of

time required to achieve reasonable practice and the amount of time that a tactical unit can afford to release soldiers from other unit duties and training. It is a reasonable compromise.

It must be understood that if peacetime utilization is not carefully managed it can destroy the delicate balance of the company-platoon-squad-team chain of command upon which tactical units depend to function with a large amount of complicated and maintenance-intensive equipment. The average age of these soldiers is nineteen; the average age of their supervisors is twenty-three. They routinely handle explosives, large vehicles, and dangerous electronic equipment. If a soldier is sent TDY for 60 days someone else must continue to maintain his fair share of that equipment as well as take his place in the support cycle. Fifteen percent of the personnel assigned to a tactical unit are on leave, involved in medical care, or other nonproductive duties on any given day. If an additional 10 to 20 percent of the unit is engaged in off-post peacetime utilization, the unit will have a major maintenance-readiness problem. This is especially true since the equipment operated by military linguists is maintenance intensive. These factors are also considered in light of the fact that CEWI battalions have the largest motor vehicle fleet of any battalion in the division and the lowest ratio of men assigned to equipment of any battalion in the division. See Figure 1.

The recent integration of military intelligence personnel with other skills into the intelligence Peacetime Utilization Program has not only strengthened the linguist program but has become the nucleus for genuine all-source intelligence training.

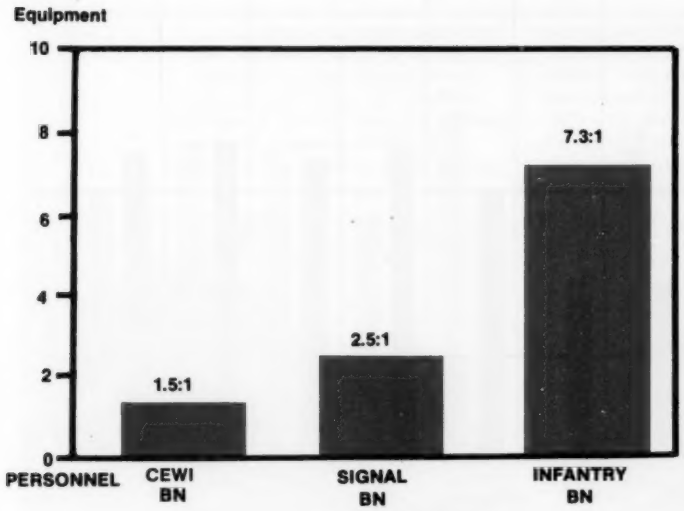
Peacetime utilization and affiliated immersion training cycles are excellent language maintenance tools and should be an integral part of any overall language utilization program, but it requires dedicated dollars and the continued compromise of maintaining unit integrity.

There have been several excellent analyses of the army linguist problem in past issues of ***MI Magazine.*** CPT Proctor, previously cited, clearly explained the role of the DLIFLC and the potential for command language programs. She appears to place commanders in the position of fueling the Army school system, of justifying the DLI Foreign Language Center curriculum. Currently that is the function of TRADOC, not the commander. TRADOC specifies that DLIFLC cannot intitiate new language projects or change current field language programs at the direct request of the commanders. Instead TRADOC follows a procedure best described as an odyssey through bureaucracy which requires CEWI commanders to request course changes through their division, their corps, their major command, to Headquarters, Department of the Army, where it will be forwarded to TRADOC and then concurrently to the United States Army Intelligence School, the INSCOM, the National Security Agency, and DLIFLC. This process may only take two years. This isn't a problem—**it is a failure.**

It costs a division two to three times more Program Two dollars to maintain a CEWI battalion than any other battalion in the division, airborne or armor. The division is entitled to a worthwhile investment. The investment is repaid by spending a lot of time in the field helping to train the division to survive in a signals warfare environment.

WO1 Conrad points this out in his article in the April-June 1978 issue of ***MI Magazine.*** In his exceptional analysis of linguist training problems, he reports that linguists spend a lot of time transcribing English voice during field training. These transcriptions not only serve as tactical intelligence during training but as an excellent SIGSEC product. Using linguists to copy SIGSEC and to operate jammers is also an ingredient to the problem.

It is true that linguists receive some procedural training and a lot of good field experience when they do this; but, they don't need as much of this training as they receive. They are in demand for these tasks because the Army does not have a separate MOS for jammer operator and because SIGSEC personnel in MOS 05G are not available in significant numbers. As a result, linguists must operate jammers and perform SIGSEC functions. MOS 05G is also the weakest MOS in the CEWI battalion. Most newly assigned 05G are not trained to entry MOS standards at the tactical level.



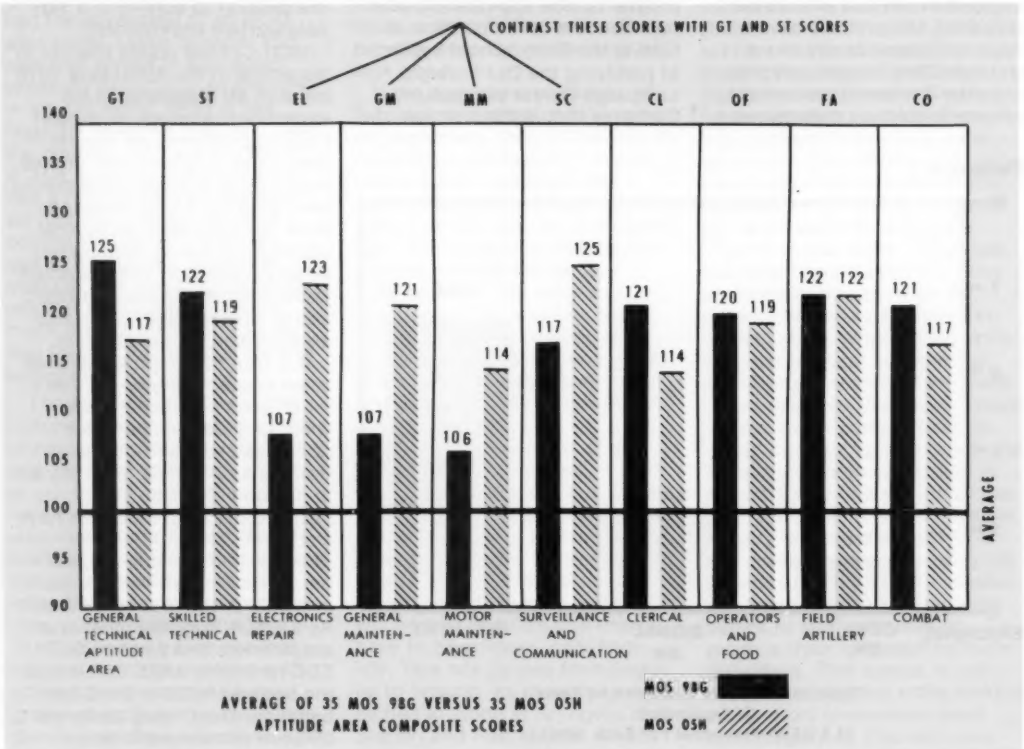
Ratio of Personnel to Major End Items Of Equipment (1.5 CEWI Personnel For Each Item)

Figure 1.

The use of linguists to operate jammers is a poor choice. Certainly linguists are required to direct jamming missions, but radio operators in MOS 05B are far better suited and trained to operate the jammer, the most sophisticated and complex electronic device in the division. A chief cause of maintenance problems with jammers is that linguists are not trained in basic radio-wave propagation, electronic fundamentals, or the use of the jammer. In fact, during the entire time the linguist is at Monterey or Goodfellow, he does not receive training in how to use the tactical equipment upon which he will depend. Unfortunately, MOS 05B radio operators are not "authorized" to operate jammers in CEWI battalions.

In too many instances, soldiers with high GT and ST scores are considered by educational theorists to be among the most adept at a wide variety of military skills. In truth, the GT and ST inventories measure an extremely limited range of aptitude rather than intelligence. It is often assumed that high GT and ST scores are synonymous with high scores and capabilities in all areas. To some extent that generalization holds true. Soldiers with above-average GT and ST scores will most likely have above average scores in all aptitude areas. Empirical data at the unit level (see Figure 2) indicates that 05H and 05B personnel are more proficient at operating jammers than are 98G personnel. A better measurement is certainly required before a correlation can be suggested, but that is exactly the point. The Army has established a performance objective which expects linguists to operate complicated electronic jammers without investigating aptitude or qualification and without establishing tasks, conditions and standards to support the objective. Jammers require the exclusive attention of the operator. In most other major armies jammers are assigned to and operated by signal units. In the US Army jammers are correctly assigned to military intelligence units to support the tactical purpose of electronic jamming on the battlefield, but operators are not provided.

The peacetime utilization of military linguists assigned to tactical units has many facets. The solution to the problem requires the design of an effective training program which treats the cause, not the symptoms. The recent success of the battalion's current off-post training program for the 358th Electronic Warfare Company indicates that the 82nd Airborne Division is heading in the right direction. The award of nine Division commendation coins to members of the 358th EW Company (more than awarded to any other battalion in the division) and seven Army Commendation Medals for special achievement indicates that soldiers with MOS 98G can be soldiers and linguists and very good ones. The solution is not cheap and should include the following recommendations:



• Distinguish between the military linguist who is a soldier and the linguist working for the military who in most cases should be a civilian.

• Substantiate the need for military linguists in tactical units by comparing the intelligence needs of the commander fighting the battle with the capability of military intelligence.

• Identify realistic performance objectives for military linguists assigned to tactical units. Don't expect E4 linguists to perform at the E7 level simultaneously in two separate MOS.

• Provide necessary recruiting and reenlistment inducements required to attract and retain adequate numbers of military linguists.

• Reinstate the educational provisions of the previous GI Bill which provided 36 months of college for 36 months of service. It attracted large numbers of CAT II and UI-A soldiers that are now in short supply. Only four percent of the soldiers in our battalion participate in the new contributory and matching educational program; the rest can't afford it.

• Promote military linguists in accordance with their capability rather than a year after their combat arms peers. Adjust the promotion cut-off scores to compare linguists with all soldiers, not with one another.

• Provide professional language equipment and material.

• Develop total immersion language cycles in tactical units supported by reference material and instructors from DLI.

• Expand peacetime utilization to allow military linguists (in uniform) to work with other federal agencies in social programs and aboard foreign fishing boats. This may require that "posse comitatus" be amended.

• Overfill tactical MOS 98G TOE positions by 20 percent to permit participation in peacetime utilization programs without detracting from unit readiness. Admittedly, this is difficult when the current incentives cannot provide even 20 percent of the linguists now authorized.

• Have DLI instructors travel to the field and spend sixty days with tactical units in order to supervise language training and to provide advanced instruction.

• Establish a separate MOS for jammer operators to relieve the military linguist of the burden for maintaining and training with this equipment.

• Improve the training of MOS 05G personnel and assign them to tactical units in adequate numbers to take the SIGSEC burden off of the linguist.

• Integrate peacetime utilization with training and maintenance on a daily basis, and require common skills SQT to be conducted in the foreign language.

• Peacetime utilization should be fun, not a pain in your rear area.

One thing is certain, we cannot continue to expect soldiers to perform as both civilians and soldiers and then blame the tactical units because linguists are not trained. We should not assign linguists to separate "language battalions" if we insist on counting these men as soldiers. If linguists are scarce and if the Department of Defense expects linguists to perform at a high skill level, then linguists should be paid more and promoted faster.

If we are to fight and win outnumbered, then military linguists assigned to tactical units will have to be well-experienced in both language and soldier skills. This will require a special soldier with special training and he will not come cheap. A rational program which will allow our tactical commanders to use exceptional linguists to see the battlefield clearly is urgently needed.

LTC Gordon is the EW officer for the 18th Airborne corps. He has previously served as the EW and Cryptologic Officer with the 101st Airborne Division, the 173rd Airborne Brigade (Sep), the 5th and 10th Special Forces Groups, and with Headquarters TRADOC. LTC Gordon's previous assignment was Commander 313th CEWI Battalion (Abn), 82nd Airborne Division. In August 1979, LTC Gordon will be attending the National War College in Washington, D.C.

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Webster's American Military Biographies edited by Robert McHenry, G. & C. Merriam Company, 1978, 560 pages.

According to Merriam Company, *Webster's American Military Biographies* is only the first volume of a series to be published on different American groups. As with any single volume compilation of biographical sketches, the size of the volume forces the editor to limit sketches by number and length. Fortunately, Mr. Robert McHenry has limited his work to a tolerable 1,033 figure, without sacrificing detail in the treatment of each.

However, this is not a Who's Who of American Generals. In fact this book is one military listing where decorations, awards and rank do not merit inclusion. In the volume are found frontier scouts and astronauts, nurses and Indian chiefs, heroes and traitors, and even the head of Eastern Airlines. The traditionalist will be reassured to know that Patton and MacArthur, Lee and Grant, Eisenhower and Washington have not been left out. More surprising though, is the inclusion of Miles Standish and John Philip Sousa, Clara Barton and "Pappy" Boyington, Buffalo Bill, Kit Carson, Cochise and Crazy Horse.

For the trivia nut, Editor McHenry has included a United States Vice-President who later led an army against his country. There is also a confederate general who became editor of the *Louisville Courier-Journal,* was nominated for Vice-President, and fathered an American general. An American who attained both the rank of rear admiral and major general is mentioned along with a Revolutionary War heroine who was credited with saving General George Washington's entire army. And, of course, no biographical listing of American military figures would be complete without "Old Blood and Guts."

In addition to the lengthy biographical section, there is a chronological listing of every significant American military campaign. A reader can therefore insert his subject into the proper time and place, and hopefully, keep the personages from becoming an indiscernable mob.

This volume will be extemely useful for the military researcher or trivia buff, but for the average reader it is too similar to Webster's more familiar work.

CPT David J. Sutherland
525 MI Group

The American Police State: The Government Against the People. David Wise, Random House, 437 pages

In *The American Police State,* Wise tells how various governmental agencies such as the FBI, IRS and CIA have spied on US citizens and how these agencies participated in break-ins, wire tappings, mail openings and suspicious tax audits. The book discusses the governmental law-breaking which was eventually brought to light by the excesses of the Watergate break-in and coverup, and highlighted in the press and Congressional Hearings.

The flavor of the book can best be described by some of the chapter titles, such as: "The Political Police;" "Break-ins;" "CIA: The Watergate Connection;" "FBI: The Lawbreakers;" and "IRS: The Abuse of Power."

Some specific examples are the wiretapping of reporters Joseph Kraft, Marvin Kalb, William Safire and Harry Brandon. Also wiretapped was NSA staff member Morton Halperin. The original political police were two former policement who did undercover work for the Nixon White House and investigated Senator Kennedy's Chappaquiddick accident. These investigators were the forerunners of the White House Plumbers unit.

The book lists several unsolved break-ins. Some of these occurred at the homes or places of business of Dan Rather and Marvin Kalb (of CBS News), Ted Szulc (New York Times), Thomas Kierman (writer), and Senators Baker and Mathias. The book also discusses the FBI's attempt, under the direction of J. Edgar Hoover, to destroy the Civil Rights Leader, Dr. Martin Luther King.

Mr. Wise's purpose is to expose these police state abuses. He seems to feel that if America is to remain free and true to its democratic ideals it must operate within the framework of the law. And where the law governing the CIA, FBI and IRS is nonexistent or vague, the law must be spelled out and then enforced. Mr. Wise feels the real tragedy of Watergate and the abuses of governmental agencies were that they really accomplished nothing but the subjugation of our own democratic beliefs.

The book is shocking but well written and interesting. Mr. Wise provides a very short bibliography which may cause some readers to question the book's content. But by writing to the US Government Printing Office and obtaining a free copy of SB-272, United States Intelligence Activities, dated 30 June 1977, an interested reader can further investigate sources of the book's revelations.

JOHN M. ROONEY
Major, Infantry
Directorate of Combat Developments, USAICS

BATTLE OF THE ATLANTIC
by Terry Hughes and John Castello, Dial Press, NY, 1977
$14.95

The Battle of the Atlantic is a modern day history book. Its 342 pages are packed with interesting facts, authentic pictures, maps, charts, and diagrams. The numerous supportive photographs (B/W) spread throughout make this book easy to read and understand. The authors, Terry Hughes and John Costello, have researched and collected a considerable amount of historical data on the most critical campaign of World War II.

The book presents a factual account of Adolf Hitler's relentless compulsion to isolate

(Continued on Page 57)

The Forward Area Limited Observation Program in Korea

by MAJ Gerald Donovan, USAF

On 18 August 1976, two US Army officers were bludgeoned to death in the neutral Joint Security Area (JSA) at Panmunjom by North Korean guards. The two officers had been supervising a work detail that was pruning a Poplar tree on the south side of the Military Demarcation Line.

In the 23 years since the Armistice, vegetation that obstructed vision had been periodically cleared by both sides without incident. The viciousness and irrationality of the attack immediately heightened tensions in an area already sensitized to crisis after nearly a quarter century of uneasy armistice.

On 19 August, US and Republic of Korea (ROK) forces south of the Demilitarized Zone (DMZ) were placed on an increased state of alert. On the same day North Korean armed forces assumed a "wartime posture." From the outset the North Korean alert was reactive; urgent but defensive in character. Nonetheless, the situation clearly forecast the possibility of military conflict. For the first time in the post-armistice period, both sides were leaning forward in an advanced readiness condition.

Behind the lines, staff combat support activity proceeded at a pace commensurate with the crisis. USAF staff weather officers (SWO's) at the two major US Headquarters north of Seoul (HQ I Corps ROK/US Group and HQ 2nd Inf Div) surged to gather essential data on cloud cover, visibility, wind speed and precipitation along the DMZ. With only two trained meteorologists between Seoul and the DMZ, the task was monumental. There were no trained weather observers in forward positions along the potential battle line!

Necessity gave instantaneous birth to invention and the two SWO's began systematic contacts with US and ROK observation posts along the DMZ. The surveillance function of these sites allowed soldiers in place to relay visibility observations to the rear for use by combat operations planners. Visibility was only one of several necessary datum needed to paint an accurate environmental picture across variable Korean terrain. For that moment, visibility observations would have to do. However, that ad hoc fix would serve as the starting point for a system that would eventually fill a significant tactical intelligence gap in Korea.

On 21 August, a reinforced ROK/US ground force, backed by an orbiting air strike force, entered the JSA at Panmunjom and reduced the offending popular tree to kindling in full view of armed North Koreans. The unpruned tree had become a symbol of brutality and the show of force was not lost on North Korea. Several hours after the tree cutting operation, the senior North Korean member of the Military Armistice Commission passed a personal message of regret from Kim Il Sung to the ROK/US side. The North Korean premier had come as close as he had ever come to apologizing for an act of aggression. After several days the crisis had subsided and military forces on both sides returned to normal readiness conditions.

In the wake of the August incident, meteorologists from the 30th USAF Weather Squadron and intelligence specialists from the Office Assistant Chief of Staff, J2, UNC/USFK/EA met to find a permanent solution to the weather reporting shortfalls dramatized by the crisis. (Under existing Army doctrine, the weather support staff is under operational control of the commander and under administrative supervision of the J2). Drawing on the history of tactical weather observation experience in Europe, 30th Weather Squadron staffers set out to design a tactical observation system that would serve the unique requirements of Korea.

A Forward Area Limited Observation Program (FALOP) was developed for Europe in 1975-76 and tested in Exercise REFORGER 77. This program designated select intelligence (S2) personnel to observe, record, encode and transmit limited surface weather observations. These observers were equipped with a belt forest fighter's weather kit which consisted of a compass, wind meter, thermometer, wet-bulb hygrometer, rain gauge and carrying case. The European concept emphasized mobility and observations were only taken by S2 personnel assigned to deployed armored cavalry, armored or infantry units in the field. Today, there are no fixed weather observation sites in Europe and the system only activates during exercises or actual contingencies.

By the summer of 1977, the 30th Weather Squadron in Seoul had developed a FALOP plan for consideration by the Commander of US Forces Korea. The plan was an expanded version of the European model with both day-to-day and crisis applications. The DMZ had been surveyed to identify existing observation and radar sites which would be suitable to provide constant reporting across the peninsula from the Yellow Sea to the Sea of Japan. The program was to be implemented first in the western half of the Republic by ROK and US troops and subsequently expanded to the east, manned only by ROK soldiers. Coast-to-

LIMITED SURFACE OBSERVATIONS

(UNC/USFK/EA REG 381-26

DATE 1 JAN 78

LOCATION OP 851

FOR RECORDING

1	2			3	4	5	6	7	8	9	10	11	12	13
	D	S		V	W	A	C H	R	T	W	TC	WB		
DATE 1 JAN TIME	WIND DRCTN	SPEED AVG	SPEED PEAK	VISBY	WEATHER AND OBSTRUCTIONS TO VISION	REMARKS	SKY CONDITION	ROAD	TERRAIN	WATER	TEMP	WET BULB	PLAN LANGUAGE REMARKS	OBS INIT
0825	W	5		5	H	0	SCTD MID	0	0	/	37	33		CM
1208	SW	13	19	10	R	1	BRKN H MID	1	1	/	42	41	R01025	CM
1716	V	5		2	F	0	OVC H LOW	3	3	/	34	31	R03015	CM

FOR ENCODING

14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
TABLE REFERENCE			2	1	3	4	5	6	7	8	9	10				
DATE	TIME	LOCATION	WIND DRCTN	WIND SPEED	VISBY	WEATHER	REMARKS	CLOUDS	HEIGHT	ROAD	TERRAIN	WATER	TEMP	WET BULB	PLAIN LANGUAGE REMARKS	OBS INIT
1 Jan	0825	OP 851	6	2	5	1	0	1	2	0	0	/	03	01		CM
1 Jan	1208	OP 851	5	4	6	6	1	6	2	1	1	/	06	05	R01025	CM
1 Jan	1716	OP 851	9	2	4	4	0	8	1	3	3	/	01	51	R03015	CM

JK FORM 1 DEC 77 275EK

Figure 1

coast coverage was desirable due to the variable terrain and climatic conditions peculiar to the Korean landscape. The plan, implementing directives and training materials were prepared with alternating pages of English and Hangul (Korean).

The Korean FALOP concept calls for observations on a daily basis at sunrise, noon and sunset. Observed data includes:

- ☐ Surface Wind Speed and Direction
- ☐ Surface Visibility
- ☐ Weather/Obstructions to Vision (snow, smoke, fog, rain)
- ☐ Amount of Cloud Cover
- ☐ Height of the Clouds (low, middle, high)
- ☐ Condition of the Roads (dry, wet, mud, snow)
- ☐ Conditions of the Terrain (dry, wet, mud, snow)
- ☐ Condition of Water Bodies (normal, high, ice)
- ☐ Air Temperature
- ☐ Wet Bulb (humidity) Temperature
- ☐ Remarks (Precipitation Amounts)

Observations are recorded and encoded on a single form (see figure 1). The reduction of observations to a ten digit numerical code was designed to simplify voice relay of weather observations. Observations are measured with the aid of belt kit instruments and ten conversion tables which correspond to the elements observed (see figure 2). A trained observer can record, encode and transmit a complete ten element weather observation in 15 minutes. The FALOP code is relayed over nonsecure voice circuits from the local site to Corps/Division Tactical Operations Center (TOC) where they are combined and relayed to the Tactical Air Control Center (TACC). Here, for the first time, the codes are handled by professional weather personnel who feed the observations to dedicated weather teletype circuits.

The FALOP system in Korea is unique insofar as it provides a high return on a small investment. Its biggest selling points have been low cost, ease of use and absence of maintenance problems. The complete belt kit contains five instruments, weighs only 1.5 lbs and costs less than $50 per kit. Front line soldiers and existing observation sites form the core of the network. No observers require intelligence or weather backgrounds; the program simply adds a specialized observation requirement to a soldier's normal duties. A competent observer can be trained in less than five hours. His reports are passed over existing voice and teletype communications circuits. The only projected maintenance costs for the system are replacement parts for the belt kits.

The payoff from FALOP is both immediate and comprehensive. The western sector of FALOP was operational in May 1978. For the first time in the history of the Korean stalemate, tactical and rear echelon commanders have access to localized weather and trafficability data on a continuing basis. Reports should never be more

TABLE 1 DIRECTION OF WIND (D)

OBSERVED (DEGREES)	RECORD (2) (DIRECTION)	ENCODE (17) (CODE)
Calm	0	0
023-067	NE	1
068-112	E	2
113-157	SE	3
158-202	S	4
203-247	SW	5
248-292	W	6
293-337	NW	7
338-022	N	8
Variable	V	9

TABLE 2 WIND SPEED (S)

OBSERVED (MPH)	RECORD (2) (KNOTS)	ENCODE (18) (CODE)
0	0	0
1-3	2	1
4-7	5	2
8-12	9	3
13-10	13	4
19-24	19	5
25-31	25	6
32-38	31	7
39-46	37	8
47+	45+	9

TABLE 3 SURFACE VISIBILITY (V)

OBSERVED (METERS)	RECORD (3) (Kilometers)	ENCODE (19) (CODE)
0-200	.2	1
200-500	.5	2
500-1000	1	3
1-2 Km	2	4
2-5 Km	5	5
5-10 Km	10	6
10 Km+	10+	7

TABLE 4 WEATHER (W)

OBSERVED (WEATHER)	RECORD (4) (Abbreviation)	ENCODE (20) (CODE)
No Significant Weather	Blank	0
Haze, Smoke, Dust	H	1
Freezing Rain or Drizzle	ZR	2
Blowing Dust or Snow	BD	3
Fog	F	4
Drizzle	L	5
Rain	R	6
Snow	S	7
Showers (Rain or Snow)	W	8
Thunder or Lightning	T	9

TABLE 5 AMPLIFYING REMARKS (WEATHER) (A)

OBSERVED (WEATHER)	RECORD (5) (Abbreviation)	ENCODE (21) (CODE)
No Specification	0	0
Light	1	1
Moderate	2	2
Heavy	3	3
In Past Hour	4	4
Within Sight	5	5
Hail	6	6

TABLE 6 TOTAL AMOUNT OF CLOUD (C)

OBSERVED (AMOUNT)	RECORD (6) (Abbreviation)	ENCODE (22) (CODE)
Clear (No Clouds)	CLR	0
Scattered (1/8-4/8)	SCTD	1
Scattered (Hills in Clouds)	SCTD II	2
Broken (5/8-7/8)	BRKN	5
Broken (Hills in Clouds)	BRKN II	6
Overcast (8/8)	OVC	7
Overcast (Hills in Clouds)	OVC II	8

TABLE 7 CLOUD HEIGHT (H)

OBSERVED (FEET/METERS)	RECORD (6) (TYPE)	ENCODE (23) (CODE)
0-1500/0-450	LOW	1
1500-5000/ 450-1500	MID	2
Above 5000/1500	HIGH	3

TABLE 8 STATE OF ROAD (R)

OBSERVED (CONDITION)	RECORD (7) (CODE)	ENCODE (24) (CODE)
Dry	0	0
Wet	1	1
Flooded	2	2
Mud	3	3
Slush	4	4
Ice Patches	5	5
Glazed Ice	6	6
Snow (Depth 0-5 cm)	7	7
Snow (Depth 5+ cm)	8	8
Drifting Snow	9	9

TABLE 9 STATE OF TERRAIN (T)

OBSERVED (CONDITION)	RECORD (8) (CODE)	ENCODE (25) (CODE)
Dry	0	0
Wet	1	1
Flooded	2	2
Mud (0-8 cm)	3	3
Mud (8+ cm)	4	4
Pools of Water	5	5
Ground Frozen	6	6
Snow (Depth 0-4 cm)	7	7
Snow (Depth 5-25 cm)	8	8
Snow (Depth 25+ cm)	9	9

TABLE 10 STATE OF WATER (W)

OBSERVED (CONDITION)	RECORD (9) (CODE)	ENCODE (26) (CODE)
Water Level Normal	0	0
Water Level Low	1	1
Water Level High	2	2
Banks Over Flowing	3	3
Floating Ice (Over 50%)	4	4
Thin Ice (0-4 cm)	5	5
Ice (5-9 cm)	6	6
Ice (10-24 cm)	7	7
Ice (25+ cm)	8	8
Ice-Passable for People (Depth Unk)	9	9

Figure 2

than several hours old. The utility of FALOP program crosses both service and national boundaries. Weather observations will be used by US Army, USAF and ROK forces. The joint/combined utility of FALOP is a working symbol of interservice and international cooperation to satisfy a common need.

Major Donovan holds a BA degree from Iowa College and an MS from the University of Southern California. Previous asignments include: 460th Recon Tech Sqdn, Vietnam; 544th Aerospace Recon Tech Wg, SAC, Omaha, Nebraska; HQ Pacific Air Forces, Hawaii; HQ United Nations Command, Korea; Defense Intelligence Agency, Washington, D.C. His functional experience includes command of a training squadron, imagery analysis, current intelligence, estimates, intelligence applications and plans. He is currently assigned to the Defense Intelligence Agency as chief of the Africa/South America/Mid-East Team, Customer Requirements Branch, Imagery Division, Directorate for Collection Operations.

INSTRUMENTS OF DARKNESS:

The History of Electronic Warfare, by Alfred Price, Charles Scribner's Sons, New York, NY, 1978 284 pages $12.95

Although the scope of this history is limited to air and counterair operations, it is within its limits a good introductory history. The early chapters introduce the development (and principles) of radar and radio navigation aids. The book then traces the use of both and the development of electronic countermeasures in the Second World War in Europe. The use of radar, radar detectors, radar jammers, chaff and communications jamming as each side sought to control the skies of Europe is told in a combination of clear technical narratives of hardware development and first-person narratives of its use.

The new edition of this book, originally published in 1967, adds two chapters to very briefly describe air electronic warfare since 1945. The final chapter, "Re-inventing the Wheel," presents some measures taken in Vietnam and the Middle East to deal with increasingly sophisticated air defense measures including guided missiles and radar-directed guns. A first-person description of a "Wild Weasel" air defense suppression mission adds spice.

Within its limits, this book is a good historical introduction to electronic warfare in the air. Nothing, however, reflects the fact that electronic warfare has played an increasingly important part in warfare on land since the First World War. With the warning that the subtitle of the book should be "*The Early History of Electronic Warfare* in the Air," I recommend it to all who fight in or beneath the skies.

CPT Jeffrey V. Cornelius
US Army Intelligence & Security Board

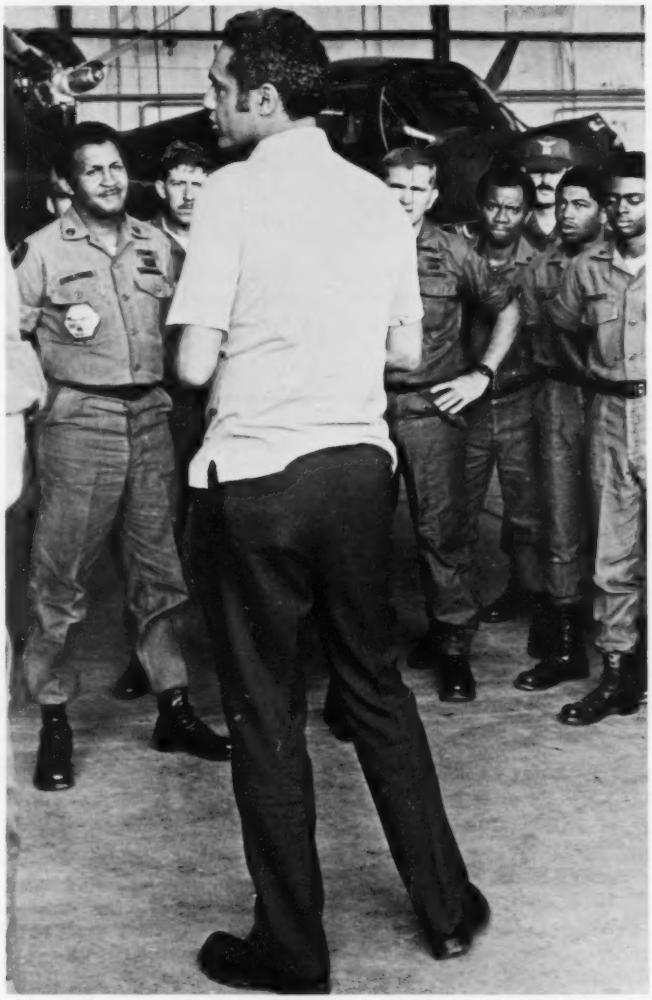
SLAR's I&W Peacekeeping Role in Korea

CPT TED D. WHITLEY

As darkness settles over the Land of the Morning Calm the men and women working Korea's Side-Looking Airborne Radar (SLAR) mission prepare for the night's activities. The SLAR team, consisting mostly of maintenance personnel, Imagery Interpreters (II's), and aircrews, maintains a continuous readiness posture to provide Indications and Warning (I&W) information to the combined ROK-US Command.

The OV-1 SLAR Mission is responsive to the intelligence requirements of the 8th Army Commander although the SLAR assets, as well as the entire 146th Avn Co, belong to the US Army Intelligence and Security Command (INSCOM). Within Korea, the Commander, 501st MI Group, exercises command authority over the 146th Avn Co through the Commander, US Army Field Station Korea, but operational control of the SLAR mission is exercised by the 8th Army Commander. The J2, 8th Army, can task the SLAR team to perform quick reaction missions anytime, day or night. In less than 90 minutes from the time a quick reaction mission is initiated, an OV-1 can be on-station providing data-linked SLAR imagery to ground stations located at I-Corps and First ROK Army Headquarters. Additionally, inflight reports direct from the OV-1 can be received by both ground stations and the base station located at Camp Humphreys, Korea.

Most missions are not the quick reaction type. The OV-1 SLAR surveillance missions are conducted on a SECRET schedule generated by J2. This schedule is designed to place an OV-1 on-station at a specific time to complement the entire intelligence collection program. OV-1s normally fly at night or during periods of prolonged inclement weather. The SLAR sensor, with its moving target capability, is excellent for conducting imagery intelligence (IMINT) during periods of reduced visibility. Because of the OV-1s near all-weather capability, the aircrews find themselves frequently flying in some of the most unfavorable weather Korea can offer.



Secretary of the Army, Clifford Alexander during a visit to the 704th MIDAS. Mr. Alexander was briefed on SLAR's I & W role in the Republic of Korea. Other distinguished visitors to the OV-1 were the US Army Council General, CDR US Air Force, Korea; & CDR INSCOM.

A typical SLAR mission begins many hours before the scheduled take-off time. Maintenance personnel must prepare two operationally perfect SLAR-configured OV-1s. The pilot preflights the primary aircraft while the Technical Observer (TO) performs checks on the SLAR,

Inertial Navigation and Automatic Data Annotation systems. As time permits, the same procedures are undertaken with the back-up aircraft. If a system malfunction develops with the primary mission aircraft, the back-up aircraft will provide assurance that the sensitive SLAR mission will be completed on schedule.

Following all pre-flight checks and inspections, the pilot and TO receive a mission briefing, check the forecast weather conditions, review the assigned mission profile, and prepare flight logs and codes required for the mission.

By the time the crew enters the aircraft, they have been preparing for hours. Once in the aircraft, an additional 10-20 minutes will be required before the wheels are in the wells and the Mohawk is on its way to the mission area. Quick reaction missions can be performed in half the time required for normal missions by following abbreviated procedures.

Maintenance is especially difficult when there are only 6 OU-IDs in Korea. Repair parts arrive slowly. Frequently parts must be traded between aircraft in order to make one aircraft operational. Maintenance personnel sometimes have to work round-the clock, switching turbines and other system components.

Missions are flown on undisclosed tactical flight plans which prohibit unauthorized personnel from obtaining flight path information. Mission tracks are classified, but with a mission duration of two to three hours, there is adequate fuel to fly coast to coast with additional time to place emphasis on areas of specific interest.

Abnormally high movement levels or irregularities in movement patterns are readily detected by the TO on his near real-time SLAR cockpit display. Time critical data may be encrypted or transmitted via secure FM to the ground stations. If no critical data is obtained inflight, the pilot completes the mission as planned and returns to A511 (Camp Humphreys) airfield where the film will be studied in detail by experienced imagery interpreters.

Shortly after th OV-1 returns to base, a mission report (MISREP) and a HOT-PHOTO report are transmitted via secure telephone to the J2 I&W Center in Seoul. These brief reports are based on a cursory SLAR imagery analysis and are intended to be timely reports of mission highlights. Following these initial reports, the IIs perform the tedious task of plotting the 4-digit grid coordinates of each moving target indicator (MTI). These unsung heroes of the SLAR mission provide a critical I&W function. They (all 6 of them) work in shifts around the clock, covering every mission. Their familiarity with the mission area enables them to analyze inconspicuous changes in movement patterns which are explained in the analytical portion of the final SLAR mission report called the IPIR (Initial Photographic Mission Report). In the future, imagery analysis will be assisted by automatic data processing. Computerization will significantly upgrade the reliability of I&W analysis, but no amount of mechanical processing will completely replace the II who studies mission film every day for 11 months. The IPIR, which must be completed within 4 hours of aircraft return, marks the official completion of the mission, but not the end of the II's duties. He or she may be required to repeat the same process for another misison or at a minimum, brief the new II coming on duty.

An OV-1D just prior to take-off on a normal night SLAR mission. The pilot is making final system and instrument checks while waiting for the precise take-off time.

There is little glamor or recognition for everyone involved in the night's SLAR activities as most efforts are covered by the cloak of darkness. Crew chiefs, II's, and flight operations clerks monitor every mission detail while sensor repair specialists wait for the next unexpected system malfunction. The dedication of every man and woman is especially appreciated by the aircrew whose life depends on the professionalism of all the technicians responsible for the Mohawk's return. As the sun rises, Camp Humphreys awakens and soldiers begin their daily routines. Few notice the charcoal black OV-1 Mohawk as it thrusts its way through the still morning fog on its way to a well-deserved landing and the (successful) termination of another SLAR flight.

A 1972 graduate of West Point, CPT Whitley attended Airborne training and Armor Officers' Basic Course before being assigned to the 2-77 Armor Battalion at Fort Lewis, WA., as a platoon leader and company XO. He attended the 35A course and returned to 1st Bde, 9th INF Div as the Asst Bde S2 and later the 35C course enroute to flight training at Fort Rucker. He served as a Surveillance Platoon leader in the OV-1D unit in Korea before attending the MI Advance Course in July 78. CPT Whitley is now assigned to the Department of Imagery Intelligence, USAICS, as an instructor of OV-1 Reconnaissance and Surveillance systems.

Great Britain. This task was given to the pride of the Reich Navy, the U-Boat. The highly qualified commanders and crews of the U-Boat task force began their deadly mission by attacking and sinking the British passenger liner, Athenia. This warfare continued from 1939 to 1945, resulting in the sinking 13,033,611 tons of British, Allied and neutral merchant ships.

The format of the text spans sixteen chapters. It gives a chronological portrayal of the major conflicts and crucial political decisions which pulled both men and machines together in one of the most ruthless conflicts in history. Logistics were critical and strategic industries irreplaceable. Each ship lost to U-Boat "Wolfpacks" served to tighten the noose around England.

Realizing the dilemma facing Britain, Winston Churchill delicately guided England's war effort through the use of his well kept secret, ULTRA. The ULTRA codes used by Germany were considered unbreakable by Hitler but British intelligence broke them. Churchill and President Franklin D. Roosevelt secretly negotiated before and after the United States involvement in World War II, selecting lines of defense and plans of action based on decoded ULTRA intercepts. Ultra proved to be the primary reason for Allied victory in World War II and a primary example of the efficient use of intelligence and the unquestionable importance of protecting a source. The well-organized intelligence effort was imperative to Churchill and Roosevelt.

The Battle of the Atlantic is a story of power, machines, people, death, courage, and hardship. It shows the rigors of war and tells many previously untold stories that historical studies always seem to reveal. It serves to remind those who were not there that the Atlantic Campaign was a fight for the survival of a nation and a way of life.

2LT Bill DeWitt

HITLER: THE PICTORIAL DOCUMENTARY OF HIS LIFE,

by John Toland, Doubleday., Inc., Garden City, New York. 1978, 205 pages, 454 Illustrations. Price $14.95.

"One picture is worth a thousand words." This is the basic premise upon which the companion volume to John Toland's biography on Hitler is built. As Toland notes in the foreward, this book is a supplement to his lengthy and detailed biography on the life and times of Adolf Hitler.

Many of the photographs contained in this work have never before been published. The author has used many photographs from Eva Braun's (Hitler's mistress) personal photograph album, as well as Von Ribbentrop's (Foreign Minister) collection. These are of excellent quality and content, and should be of interest to any student of military history. Each photograph is accompanied by a brief commentary to avoid false impressions. The majority of the photographs are black-and-white, although there are 11 excellent color plates included. Though this work was mainly intended as a picture book, there is enough solid information to give the reader a good background on Hitler's life. The chapters proceed in chronological order, starting with Hitler's birth and ending with the destruction of the Third Reich. The important details of what formed Hitler's thoughts and actions are explained simply and concisely by the author.

John Toland has shed new light on this subject through his exhaustive research and documentation. The author has exposed many falsehoods about Hitler and replaced them with factual evidence. The reader will be able to follow Hitler's change from loving son and developing artist to a megalomaniac indifferent even to his own people's suffering. The photographs of Hitler's "inner circle" are particularly revealing, as they show the people who influenced Hitler from his rise to power to the defeat of Germany.

This work is not limited to the political side of the war. The author has included many informative photographs of the fighting on all fronts. If I were asked to recommend any one book on Germany's role in WWII, this would certainly be that book. Whether you are a collector or a military historian, this work is a must.

L/CPL Thiel
1st Marine Rgt.
1st Marine Division
Camp Pendleton, CA 92055

Editor,

The primary reason I subscribe to MI Magazine is to keep abreast of professional developments in the many component fields of the intelligence business. For that reason I enjoyed the Jan-Mar issue for the update on computer programs devoted to intelligence. However, I hasten to add that the most significant article in that issue was tucked way back on page 45—LTC Stan Fulcher's article entitled "New Perspective." We have just been subjected to another setback to US objectives with the change in government in Iran and there have been other events recently that did not transpire to our nation's best interests. LTC Fulcher is entirely correct in cautioning the intelligence profession not to rely too heavily on hardware and electronics. Our profession has a crying need for skilled analysts and HUMINT specialists who can ferret out the nuances of intelligence that machines, satellites, and earsets cannot. We must guard against over-reliance on machines at the expense of our very own "human intelligence." Preoccupation with one area of the world (Europe) or one mode of intelligence collection could have extremely unfortunate results.

I don't know who dreamed up the MI Prayer but I laughed my way through it several times and then made copies for the other folks in the office (I'm the only MI man here). Somebody did a super job on that!
Sincerely yours,

John B. Haseman
MAJ, MI
Jakarta, Indonesia

Notes on Officer

The New OER

An extensive review of the regulation and supporting policies for the new OER has been completed with the major commands.

The Army will transition to the new OER system during the period 15 September to 1 November 1979. The transition to the new system will be preceded by a closeout of the present system (a final report using the DA Form 67-7). The objectives of the closeout and transition period are to ensure that there is a standardized and equitable transition from the old to the new OER system and to ensure that there is sufficient time for objective setting and performance discussion between rated officers and their raters prior to the submission of reports under the new system.

An education and information program has been implemented to inform the officer corps of the features of the new system. Some of the highlights of the program are:

MILPERCEN teams will conduct briefings for the officer corps at major units and installations Army-wide starting in May and continuing through August.

A pamphlet describing the new system will be distributed to each officer in August. This "in brief" pamphlet will also include instructions and guidance for rated officers and rating officials.

Various articles highlighting the salient features of the new system have been printed and will continue to be published throughout the transition period.

A TV tape has been produced which presents an overview of the system and addresses the hard questions concerning it.

A training package is being developed for distribution to service schools and inclusion in the Army correspondence course program. It will be useful for rated officers, rating officials and officer and enlisted personnel administrators who will manage the system.

The three forms which the new system uses will be available in June 1979.

The new OER, DA Form 67-8, differs from the current OER in that it emphasizes the duty description, includes a more structured performance narrative, increases the role of more senior officers in the rating chain and provides Department of the Army with a mechanism to track the variability of senior raters, and does not utilize a numerical score.

The Support Form, DA Form 67-8-1, is for field use only in that it accompanies the OER through the rating chain but does not accompany the OER to Department of the Army. The Support Form encourages discussion between the rater and rated officer at the beginning of the rating period on the duty description and specific objectives which guide performance.

The form also increases the role of the rated officer by providing him the opportunity at the end of the rating period to describe his accomplishments as well as duties and objectives to seniors in the rating chain.

The Senior Rater Profile Report, DA Form 67-8-2, is for Army use in maintaining a record of the evaluation history of each senior rater (normally the next senior officer to the rater). This gives Department of the Army the capability to track the variability of senior raters. The form will be maintained at DA and made available to the senior rater.

The new Officer Evaluation Reporting System is the result of a comprehensive developmental effort which began in 1973. Information was gathered from a range of rating environments in over 100 Active Army, Reserve and National Guard organizations, a large cross section of the Active Army officer corps, over 50 selection boards and a large number of DA managers. The effort also included a worldwide survey of the officer corps, a field test of the new system as well as a review of available information from past Army systems, sister services, selected foreign services, civilian industry, government and academia.

The new system is not a panacea for all the real or imagined ills of the current system. The new system should, however, be a significant improvement over today's system. The extensive field participation during the developmental effort resulted in a great deal of assistance, support and even enthusiasm from a significant portion of the officer corps.

This should translate into a relatively high degree of officer corps acceptance once the system is implemented.

The new system incorporates several features which have not been included in previous Officer Evaluation Reporting Systems.

Rated Officer Participation - Participation by the rated officer in the evaluation process provides additional information from the rated officer's point of view to the rating officials, encourages mission-related discussions early in the rating period which will, in turn, improve the professional development of officers, and enhances the effectiveness of organizations by relating performance to organizational missions. This is accomplished by an objective setting process early in the rating period and the rated officer's description of his duties, responsibilities, objectives and contributions on an OER Support Form at the end of the rating period.

Senior Rater Concept - This concept includes two major changes. First, it increases the role of the most senior rating officer from a purely administrative role to include a critical evaluation of the rated officer's potential. Second, it allows for greater flexibility in the number of officials in the rating chain in order to deal more effectively with geographical spread and functional autonomy, as well as to reduce field workload. In order to reflect the change in concept, the names of the rating officials have been changed from the rater, indorser and reviewer to the rater, intermediate rater (optional), and senior rater.

It is estimated that, in accordance with the rules for estab-

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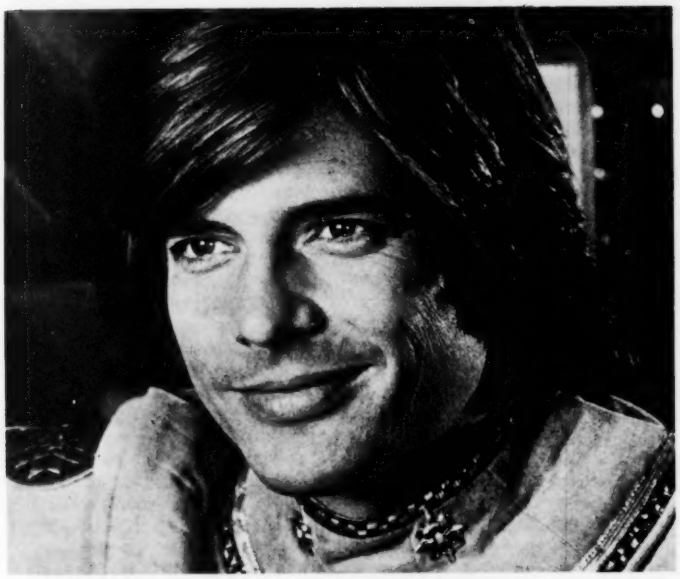
lishing rating chains, the majority of rating situations will involve the use of two rating officials, the rater and the senior rater. Therefore, in the majority of cases, the senior rater will be the same person as the current system's indorser.

Senior Rater Profile - The profile provides a comparison of a specific rating and a senior rater's normal rating tendency (e.g., easy or hard). This is accomplished by tracking the rating history of the senior rater and making it visible to boards and managers.

Support for Professional Development/Mission Accomplishment - The emphasis in the new system on the increased communication, development of subordinates, and objective setting, provides a major assist to the daily performance in support of organizational missions. This represents an expansion of the traditional functions of the Officer Evaluation System in recognition of the pervasiveness of the system in organizational activity.

Support for Army Personnel Management Program - Explicit techniques are included which highlight and support the specialty concept of OPMS, focus the attention of officers on the human side of the organization, emphasize the functions of programs and encourage open channels of communications and constructive problem solving.

Increased Administrative Accuracy - Improvement is accomplished by simplifying certain administrative items such as the authentication of administrative data and the change from the duty day to the calendar day concept.

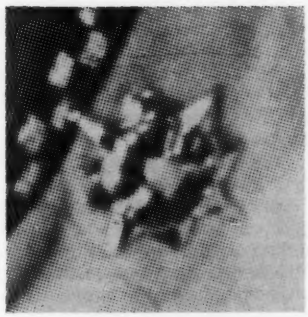


"Is That MI Brass?

If you answered "yes" to the "Is that MI Brass?" poll run in the January-March 1979 issue of Military Intelligence, you're right. Here are the photos you've been waiting for.

You might notice, however, that while the insignia remains unchanged from that of the late 20th Century, haircut regulations have been somewhat relaxed.

Photographs courtesy of Universal City Studios, Inc., copyright 1978.



Editor:
Having closely observed the insignia worn by the Colonial Warriors, I have concluded, without reservation, that it is MI.

Anonymous
San Francisco,CA

Warriors are probably "37/15", primary and alternate specialties.

Editor

Specialties 37/15 are Electronic Warfare/Cryptology and Aviation.

INTELLIGENCE TRAINING LITERATURE

The following Field Manuals (FMs) and Training Circulars (TCs) update previously published information. Please note that "34" is the new identifer for tactical intelligence publications; the "30" series of documents will be phased out. (Manuals replacing or combining other manuals will be indicated by R or C.)

FM 34-1

Intelligence Electronic Warfare Operations

R/C FM 30-5 and TCs 30-19, 30-20 and 30-27

"How to Fight" Manual and functional capstone of IEW operations, FM 34-1 addresses the tactics, techniques and procedures used by the G2/G3, CEWI units and other Army units involved in the overall IEW process. Aimed at all commanders and staffs, 34-1 will expand the information contained in Chapter 7 of FM 100-5. (Fort Huachuca, FY 1980)

FM 34-2

Management of IEW Resources-Corps and Division

R/C FM 30-5 and TCs 30-25, 30-30 and 30-31

FM 34-2 describes the processes of collection management, processing, dissemination and reporting. It will indicate areas of responsibility, and who tells what to whom. (Fort Huachuca, FY 1980)

FM 34-3

Intelligence Analysis

R/C FMs 30-5, 30-7 and 32-1

This manual will provide information concerning the use of analytic techniques, the use of files and the use of data systems. Templating and IPB will also be discussed. FM 34-3 ties together the old ASA and MI analysis for CEWI and G2 operations. (Fort Devens, FY 1980)

FM 34-10

CEWI Battalion (Division)

R/C TC 30-34

Studies doctrine for employment of the CEWI battalion including organization and operations of the battalion in division operations. FM 30-34 explains the working of the battalion with G2/G3 staff. (Fort Huachuca, FY 1980)

FM 34-60

Counterintelligence Operations

R FM 30-27

Will provide tactical CI doctrine and give procedures and uses for tactical CI. FM 34-60 will bring traditional CI and SIGSEC together to support corps and division operations and rear area protection, emphasizing the applications of CI to OPSEC. (Fort Huachuca, FY 1980)

TC 30-10

Reconnaissance and Surveillance Handbook

Doctrine for R & S operations at battalion, brigade, division and corps levels will be presented in this training circular which will also include resources within a corps, reference data for aerial and ground assets, management principles and processes and forms, records, reports and overlays. (Fort Huachuca, FY 1979)

FM 34-80

Battalion/Brigade S2 Handbook

R/C TC 30-28

Will provide references and guides to help the battalion and brigade S2 in performing his or her duties. (Fort Huachuca, FY 1980)

FM 34-85

Conversion of Warsaw Pact Grids to UTM Grids

R TC 30-48

This FM will explain the two grid systems and how to convert from one to the other. (Fort Devens, FY 1980)

TC 34-88

AN/TSQ-109 AGTELIS

This training circular will provide an introduction to the system, including capabilities and employment doctrine. (Fort Huachuca, FY 1980)

FM 34-20

CEWI Group (Corps)

FM 34-20 will provide for the employment of the CEWI Group, presenting organization, operations and employment of the group in support of corps operations. It is directed toward the CEWI commander and staff, G2/G3s, MI personnel and all Army officers. (Fort Huachuca, FY 1980)

TC 34-80

Ground Surveillance Radar (GSR)

R TC 30-23

Written for MI personnel, officers, students and operators, FC 34-80 provides information on the GSR system. (Fort Huachuca, FY 1980)

The following documents are scheduled for publication in FY 1981 but additional information is not currently available.

From Fort Huachuca:

FM 34-33 ***CEWI Support to Artillery***
TC 34-81 ***Remote Sensor System (REMs)***
FM 34-22 ***Aerial Exploitation Battalion, CEWI Group (Corps)***
FM 34-14 ***Service Support Company, CEWI Battalion (Division)***
FM 34-23 ***Tactical Exploitation Battalion, CEWI Group (Corps)***
FM 34-30 ***CEWI Company (Separate Brigade)***
FM 34-84 ***Guide to Writing Scenarios and Intelligence Plans***
TC 34-91 ***MAGIIC***

From Fort Devens:

FM 34-13 ***Platoon Leader's/Team Chief's Handbook***
FM 34-21 ***EW Battalion, CEWI Group (Corps)***
FM 34-32 ***CEWI Company/Detachment (Special Forces)***
FM 34-51 ***SIGINT/EW Templating***
FM 34-62 ***SIGSEC Techniques***
TC 34-85 ***GUARDRAIL/QUICK LOOK***
TC 34-86 ***QUICK FIX***
TC 34-87 ***AN/MSQ-103***
TC 34-90 ***AN/MLQ-34 TACJAM***
TC 34-92 ***MULTEWS Air***

U.S. Government Printing Office 1979—4-N1079

Effective immediately, TCs will have a three-year lifespan unless they contain systems information. Exceptions to this policy will be considered on an individual basis.

Points of contact at USAICS Literature Doctrine Office are Mr. Phillip O. Young or Mr. Ronald E. Fay. Autovon: 879-2085/5750. Mailing address: Commander, USAICS, ATTN: ATSI-TD-LD, Fort Huachuca, Az. 85613.

NOTE: USAICS does not stock copies of Field Manuals or Training Circulars. the best way to obtain copies of needed documents is through your publications control personnel.

Ronald E. Fay
DAC
Literature Doctrine Office

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professional reader

SEXPIONAGE:
The Exploitation of Sex by Soviet Intelligence, by David Lewis, Ballantine Books, New York, 1977, 206 pp.

Prostitution may be the world's oldest profession, but the art of espionage isn't too far behind. When one combines sex and spying as practiced in the twentieth century, the net results are fascinating to the student of international espionage. It becomes quite clear that not only have the goals of espionage changed but also the techniques. *Sexpionage: The Exploitation of Sex by Soviet Intelligence,* authored by David Lewis, cites several examples to demonstrate the degree of sophistication and the extent of sexpionage operations developed by Soviet espionage.

The scope of the book is generally limited to the post-World War II period, with some attention devoted to sexpionage operations in Soviet bloc countries. However, some information relating to the pre-war period is also made available and is quite helpful in setting the background for the post-World War II period. In researching the book, the author used three major types of sources: published material ranging from books to newspaper and magazine articles; formal interviews, usually given on a non-attributable basis; and informal conversations with a wide variety of individuals who have had KGB activity. The writing is lucid and commands the attention of the reader.

The author's theme is not exactly unique. Apparently, the Soviet espionage establishment has recognized the potential of sex as a technique for securing intelligence and has used sex on several occasions to counter or neutralize the efforts of Western Powers. Although many countries (including the United States) make use of sexpionage, the author notes that no espionage establishment matches the KGB for variety, scope, and use. By recruiting and training males and females to engage in covert sexual activities and equipping them with the latest sophisticated gadgetry ". . .the Soviet secret service has achieved the most refined form of sexpionage possible." (Text,p.7)

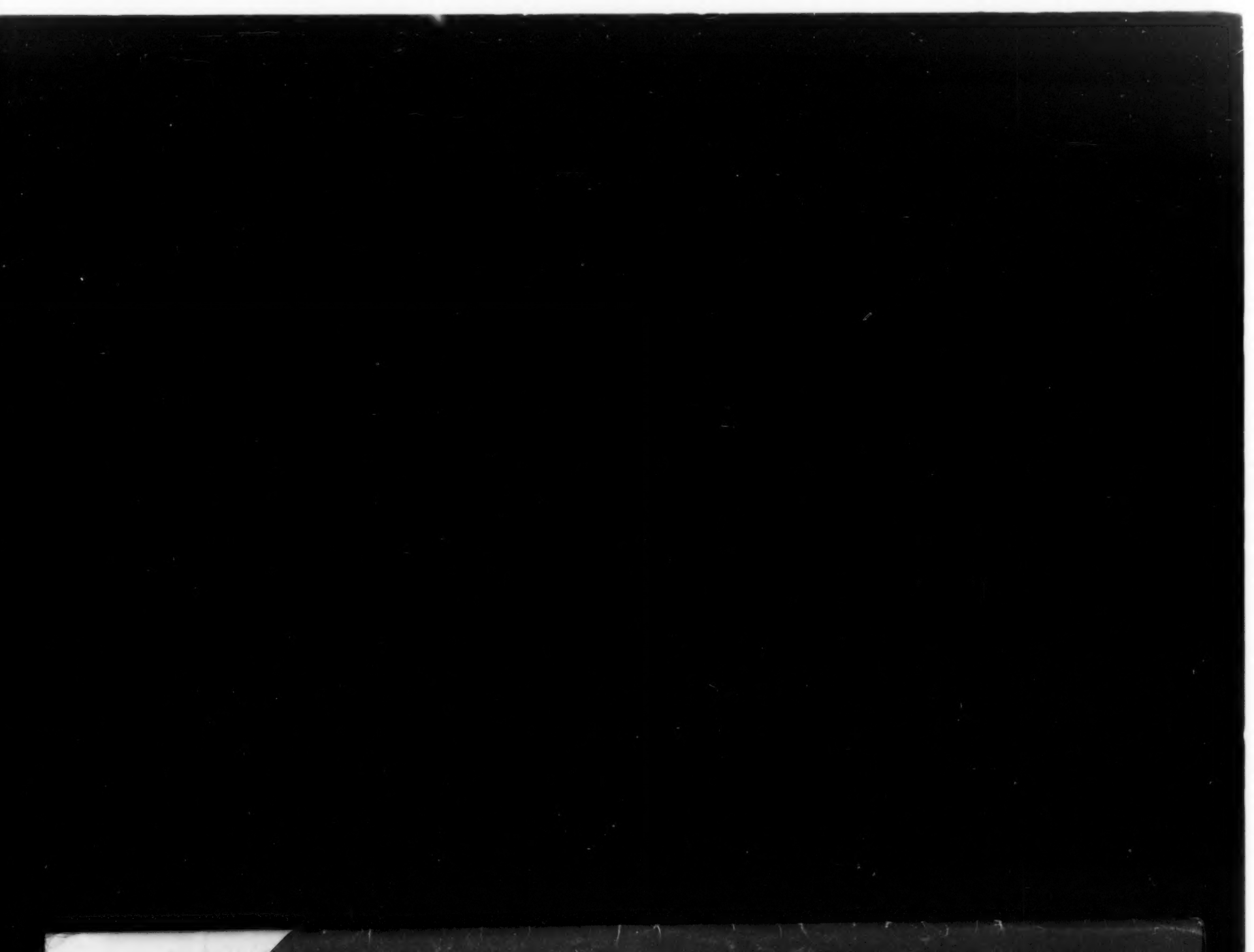
The leaking of derogatory information concerning the sexual activity of a prominent public official may also be of benefit to the Soviet cause. Mr. Lewis cites the example of a British commander who had an affair with a Soviet woman while he was stationed in Moscow. Upon returning to Great Britain and becoming active in politics, he took a hard line toward the Soviet Union. He subsequently found his career ruined when Soviet intelligence leaked news of his affair.

Many of us may equate espionage with the procurement of a particular piece of information. No doubt there is much validity to this view. However, Mr. Lewis notes that information may quickly become obsolete with rapidly changing times. He rightly suggests the possibility that the individual who is compromised by sexpionage and who as a result provides information on a regular basis to the KGB may be much more valuable than information which becomes obsolete in a relatively short period of time.

After citing several examples of Soviet activity in the area of sexpionage, Mr. Lewis offers some suggestions which might benefit Western powers. He recommends a general amnesty for all victims even if there has been a compromise of security. He also suggests that perhaps a change of attitude on the part of the authorities to the extent that they become more sympathetic to those individuals who become ensnarled in Soviet entrapments would be most beneficial. If such recommendations are carried out they may encourage victims to inform their superiors of their predicament. Knowing the when, where, and how of a particular Soviet sexpionage operation would be most useful to a Western security service, which presumably would be able to take future action to prevent the recurrence of such an event.

The major contribution of this book appears to be that of making us aware of the practice of the KGB to use any means to further its aims. Western travelers and officials should be cognizant of the potential for entrapment which may occur when one visits the Soviet Union or its satellite bloc countries. If this is kept in mind the possibility of being compromised and betraying the secrets of one's country may be considerably lessened for an individual.

William E. Kelly, Ph.D.
Auburn University

BOOK A

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